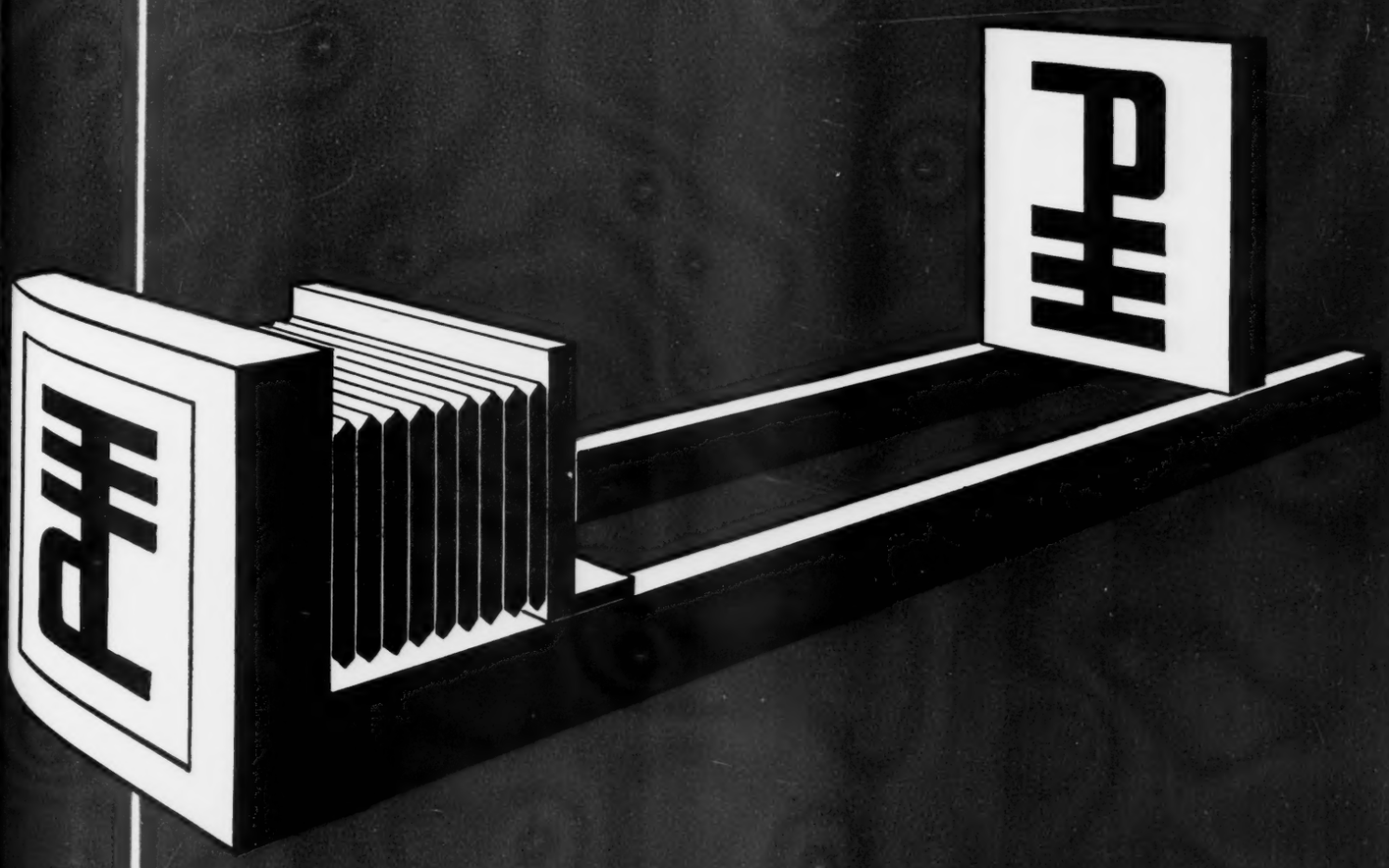
JULY 1950

PLEASE ROUTE THIS COPY TO	
Manager	Pressroom F'm'n
Production Mgr.	Bindery F'm'n
Plant Supt.	Mailing F'm'n
Platemaking F'm'n	Maintenance Supt.
Composing F'm'n	Purchasing Agt.
For filing, please return to	

PRINTING EQUIPMENT *Engineer*



AN INDUSTRY-WIDE TECHNICAL PUBLICATION

Medium-size printers can cut costs with precision printing

A LARGE part of printing production costs lies in the time it takes to dress and make ready the press. That means more costs for idle press time, more cost per square foot of floor space, more cost per printing job. Since costs must in the long run be passed on to the printing buyer, it means, in the final analysis, less printing business and less work for printers.

Industry today has passed the era of rule-of-thumb methods, of painstaking handwork to make up for inaccurate machinework. That applies to the printing industry, too, except that many printing plants have not kept pace with the advances in other industries.

Yet where printing plants have applied precision methods, pressmen have welcomed the new, improved method, and the higher quality that precision makes possible. The plant owner has been in a better position to keep up with rising costs and to hold or increase his volume.

Printing with a Cottrell 2-color sheet-fed rotary is precision printing. Plates are accurately made, so that little press and man time is lost in locking up, registering, and make-ready. The press itself is a precision machine, so that register is maintained, ink is evenly distributed, and results, particularly on color work, are gratifying to the craftsman who operates the press, and the buyer and user of the printed pieces.

Today commercial printers all over America are finding rotary letterpress the answer to the rising-cost problem. They are finding that rotary is not a different method, not merely a method for magazine publishers—but a method by which commercial printers can make money on black-and-white and color work, on runs smaller than generally supposed.

Get the details. Find out what rotary letterpress is doing for others, and whether or not you can use it in your business. Write us for full information, and the names of printers who are using Cottrell sheet-fed rotaries.

If you wish, we will ask a Cottrell counsellor to work with you, to help you analyze your problems, so that you can judge whether rotary printing will be profitable for you.

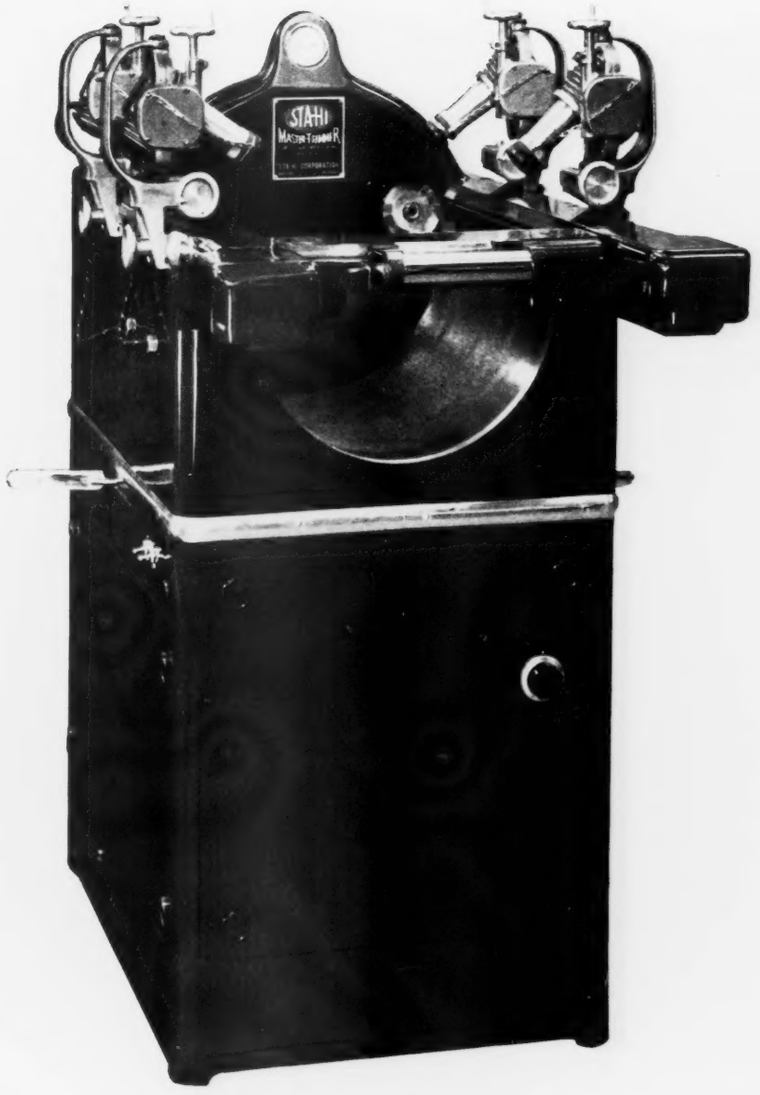
A precision plate is locked into position on a Cottrell rotary quickly, easily, and accurately, with the Claybourn spirally grooved cylinder and rapid register hooks.

C. B. COTTRELL & SONS COMPANY
Westerly, Rhode Island
Claybourn Division: Milwaukee, Wisconsin
Sales Offices: New York, Chicago, London

ACCLAIMED BY NEWSPAPER MECHANICAL LEADERS AT BUFFALO!

See Sta-Hi Master Trimmer as answer to color registering problems

- Production executives of America's daily newspapers who attended the ANPA Mechanical Conference in Buffalo in June were enthusiastic in their reception of the Sta-Hi Master Trimmer Curved Mat Registering Machine.
- They saw this radically new machine put through its paces, watched it accurately register and trim stereotype page mats for perfect color printing—all in a matter of seconds!
- They were quick to realize the potentialities of this equipment in cutting time and costs in the printing of r.o.p. color.
- If you did not see this convincing demonstration of the Sta-Hi Master Trimmer, you will want to obtain complete details on the machine, learn for yourself how it can help **you** in **your** plant—whether you are now running r.o.p. color or are making plans to run it in the future.
- Write today for descriptive literature!



STA-HI MASTER TRIMMER

STA-HI

SUPERIOR NEWSPAPER PRODUCTION MACHINERY

STA-HI CORPORATION • 235 W. WASHINGTON BLVD. • WHITTIER, CALIF.

ATF-MANN

Sheet-fed Offset Presses

1-color, 2-color and perfecting

Sales and service available through all 22 ATF Branches

In the ATF-MANN sheet-fed presses, American Type Founders Sales Corporation now makes available to lithographers and printers entirely new standards of quality and greatly enlarged profit possibilities in this large and rapidly expanding field.

ATF-MANN presses occupy a dominant position all over the world. Built to the highest standards of press manufacture, they include six single-color presses in sizes from 22" x 34" to 42" x 65", six two-color presses in sizes from 22" x 34" to 43" x 65", and a perfecting press taking a maximum size sheet 38" x 53". They incorporate features that produce the highest quality offset lithography, facilitate operation and reduce costs. Among these features are:

Superlatively quiet and smooth operation; helical gears on main drive, cylinders and water fountain; unique plate registering system; hydrostatic water control; double sheet detectors; micrometer pressure adjustment; fully automatic forced feed lubrication; stream feeder; intermediate trap delivery; unexcelled ink capacity and coverage units easily accessible.

For offset presses up to 22" x 29", investigate the long popular ATF Chiefs. For offset presses in larger sizes, investigate the ATF-MANN. Several models will be displayed at the Graphic Arts Exposition at Chicago. Plan now to see these newest presses in the ATF line of fine sheet-fed offset printing equipment.

ATF An Associate

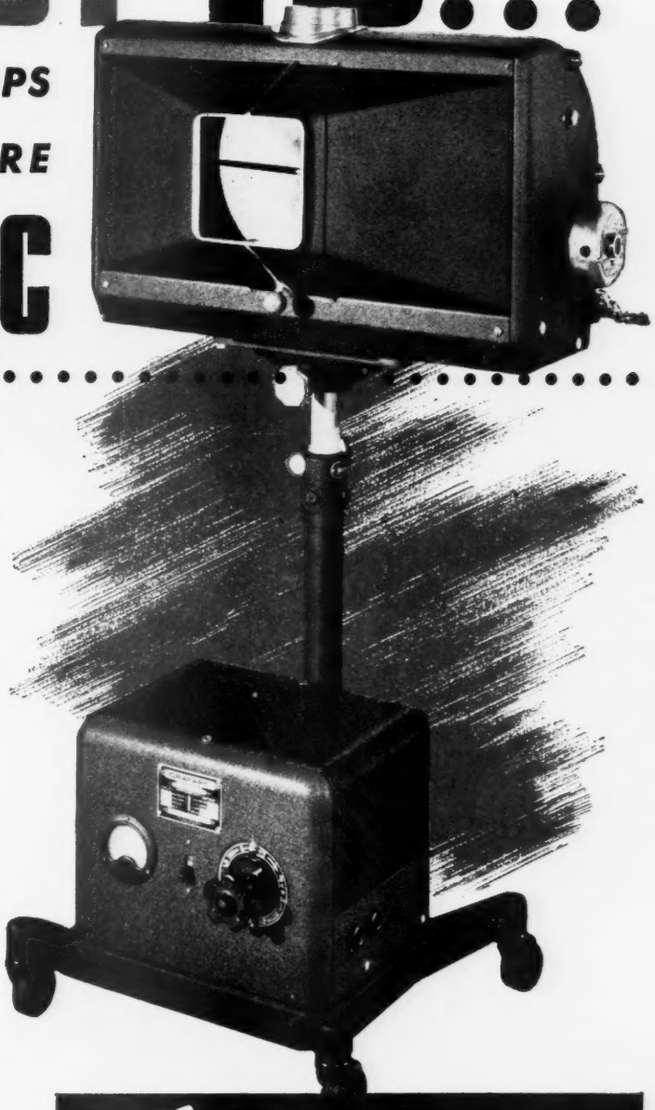
American Type Founders **200 Elmora Avenue**
Elizabeth B, New Jersey

Branches in Principal Cities

9 out of 10...

MOTOR-DRIVEN ARC LAMPS USED BY THE INDUSTRY ARE

STRONG GRAFARC



There must be reasons! Here are a few:

★ ***RUGGED CONSTRUCTION.*** Oversize carriage slide bearings. Large ball bearing motor. Bakelite gears on hardened steel worms. Heavy gauge sheet metal and aluminum cast housing.

★ ***MODERN SILVERED GLASS REFLECTOR.*** The higher reflectivity of the silvered glass reflector compared to a metal reflector results in approximately twice the light per arc watt.

★ ***ARC STEADINESS.*** The result of using high intensity carbons in a draft-shielded horizontal trim.

★ ***NO VACUUM TUBES OR RELAYS.*** The current and voltage of the arc directly control the feed motor speed.

★ ***FREEDOM FROM DOT UNDERCUTTING WHEN PRINTING*** made possible by the single arc combined with the crossover of the reflected light rays.

★ ***MORE EVEN DISTRIBUTION OF LIGHT FOR CAMERA DEPARTMENT.*** Uniform illumination on any work size.

★ ***EXTREME STEADINESS OF LIGHT VOLUME—CONSTANT COLOR TEMPERATURES.*** Eliminates the illumination variable in the accurate control of densities.

Especially designed models for camera and printing frame. Adapters to fit most cameras. Purchase Grafarc lamps NOW! Start important savings. Reap the benefits of better control and improved standards of workmanship.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO-SEPTEMBER 11-23-1950

FREE TRIAL OFFER!

Take advantage of a free trial without obligation to purchase. Because of the Grafarc's low current requirement, the present line supply wiring to your equipment is usually adequate

THE STRONG ELECTRIC CORPORATION
307 CITY PARK AVENUE TOLEDO 2, OHIO

☐ I wish to take advantage of your FREE trial offer on Grafarc Lamps without obligation to purchase.

☐ Please send me free literature and prices on Grafarc Lamps.

NAME_____

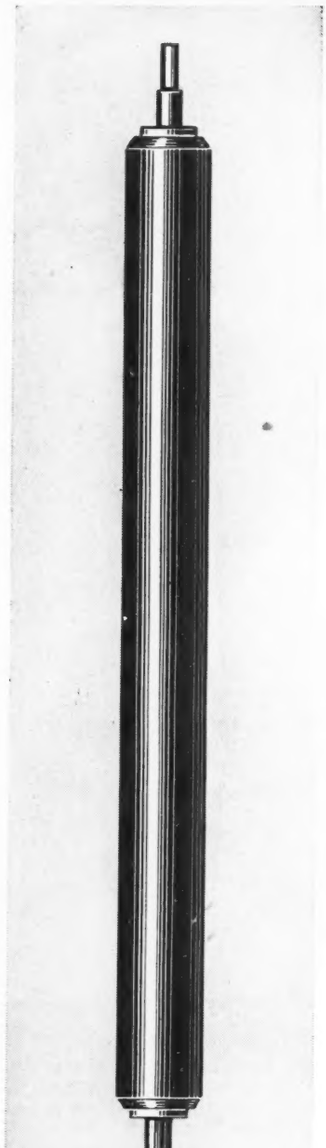
FIRM_____

STREET_____

CITY_____ STATE_____

OVER ONE HUNDRED YEARS OF ROLLER MAKING

SAM'L BINGHAM'S SON MFG. CO.



Manufacturers of

RUBBER • NON-MELTABLE • FABRIC COVERED
ROTOGRAVURE • OFFSET
COMPOSITION • VARNISH-LACQUER • GRAINING

ROLLERS

WE ARE NOW MAKING
COMPOSITION ROLLERS
for
SUMMER
USE

SHIP YOUR OLD ROLLERS TO
THE FACTORY MOST CONVENIENT TO YOU

16 Modern Factories Serving Printers in 31 States

FACTORIES

ATLANTA 3
CHICAGO 5
CLEVELAND 14
DALLAS 1
DES MOINES 2
DETROIT 10
HOUSTON 6
INDIANAPOLIS 2

SAM'L BINGHAM'S SON MFG. CO.
MANUFACTURERS OF
PRINTERS' ROLLERS
LITHO-OFFSET ROLLERS

FACTORIES

KALAMAZOO 12
KANSAS CITY 6
MINNEAPOLIS 15
NASHVILLE 3
OKLAHOMA CITY 6
PITTSBURGH 3
ST. LOUIS 2
SPRINGFIELD, O.

Pacific Coast Sales Representative; THE CALIFORNIA INK CO., INC.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO SEPTEMBER 11-2

PRINTING EQUIPMENT *Engineer*

AN INDUSTRY-WIDE TECHNICAL PUBLICATION

Published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

JULY 1950

EDITORIAL STAFF

MacD. SINCLAIR, *Editor*

ADAM HENRY REISER
Associate Editor

EDWARD H. OWEN
Assistant Editor

BUSINESS STAFF

DON WILL, *Publisher*

William L. Osborn, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone: MUrray Hill 6-5980.

Eugene A. Powers, Midwest Manager, 612 N. Michigan Ave., Chicago 11, Ill. Phone: SUperior 7-2444.

Volume 80 **Number 4**

PRINTING EQUIPMENT Engineer, Published monthly at 1276 West Third St., Cleveland 13, Ohio, Copyright 1950 by Willsea Publishing Co.

Acceptance under section 34.64 P. L. and R., authorized.

Subscription price per year, $3.50 in advance in U.S.A. Single copy current issues, 35c; feature issues $1 per copy; December Equipment and Supplies Catalog Issue $2 per copy in United States, $2.50 outside of United States. (U. S. currency). Subscriptions in foreign countries $4.50 (U. S. currency) in advance. Canadian printing plant mechanical and production executives receiving Printing Equipment Engineer under CCA regulations will be charged $1 postage per year in advance to cover additional postage to Canada.

Member Circulation CCA Controlled Audit

Printed in U. S. A.

LEADING ARTICLES FOR JULY 1950

The ABC of Offset—VII
GEORGE JOS. LENZER
Deferred till August Issue

Research and Engineering Council 23
MacD. SINCLAIR

Chroma-Graph Process 27
JOSEPH BRAUER

Books Received 28
Milwaukee *Journal* ROP Color, 28

Graphic Arts Exposition 29
A. G. FEGERT

How To Get To Exposition 31

ANPA Mechanical Conference . . 32
EDWARD H. OWEN

ANPA Research and Stereotype Session 33

Equipment and Supplies 39
Rouse Plate Saw, 39
Miller Parts Catalog, 39
Steel Stamp Bulletin, 39
Squirrel-Cage Motors, 39
Magazine Wrapping Machine, 39
Miller 19 in. by 25 in. Press, 40
TAKK Static Control, 40
Roll Leaf Broadwise, 40
IPI Color Picker, 40
Paper Jogger, 40
Scented Printing Ink, 40
Dehumidification Bulletin, 41
Starrett Push-Down-Point Dial Depth Gauge, 41
Adjustable Speed Bulletin, 41
Vertical Aftercooler, 41
Electric Chain Hoist, 41
Data Sheet Available, 41
Robertson Temperature Controlled Sink, 41

Exposition Previews 44

Time Makes Announcements . . 47

Executive Paragraphs 48

Conference Dates Box 52

Patents For The Graphic Arts . . 53

R. Hoe & Co. Metal Lithographic Press 54

PRINTING EQUIPMENT *Engineer* is an

EXHIBITOR

GRAPHIC ARTS EXPOSITION

CHICAGO-SEPTEMBER 11-23-1950

Ninth Production Yearbook

A New Reference Volume For Mechanical and Production Executives

Commercial and newspaper printing plant executives will find constant use for this encyclopediac volume.

Many new features included on photoengraving, typography, electrotypes, printing processes, paper, binding, mailing and photography.

Size, 8½ in. by 11¼ in.; 918 pages include 4000 subjects listed in the index, 659 editorial illustrations, and other features.

$15.50 per copy
Postpaid in U. S. A. only

PRINTING EQUIPMENT Engineer
1276 W. 3rd St. Cleveland 13, O.

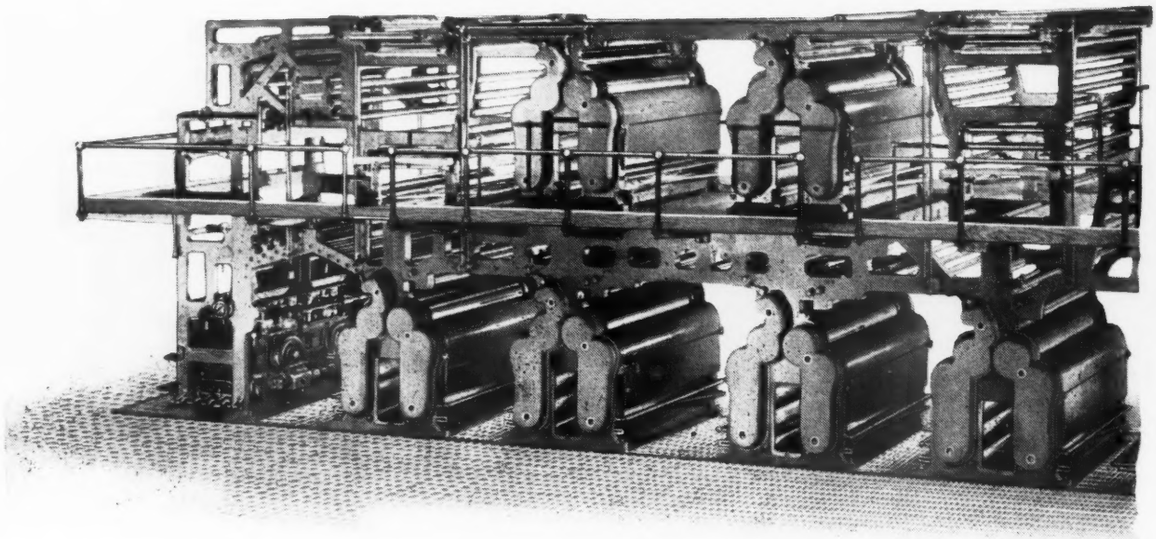
THE *Superb* PERFORMANCE

of the

SCOTT NEWSPAPER PRESSES

at the Buffalo *Courier-Express*

during the Mechanical Convention should be convincing evidence of their superior qualities and excellence.



One end of a line of Scott Octuple Presses each equipped with 4 Color Printing Couples

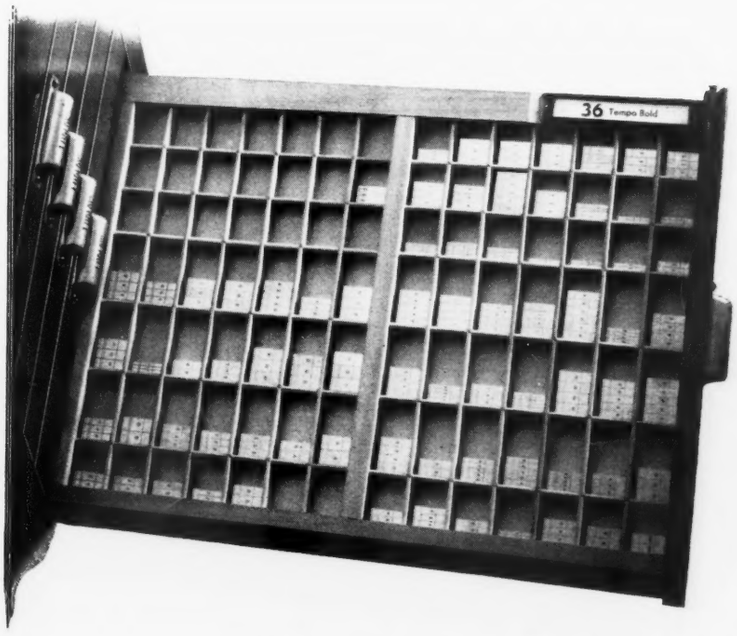
★

If you did not see the Presses running during the Convention, ask someone who did or let us show you.

WALTER SCOTT & CO., INC.

PLAINFIELD, N. J.

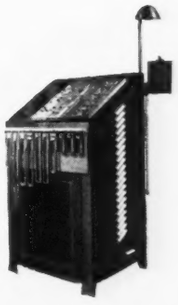
One Ludlow Matrix Font For a Single Slugline—or a Thousand



The matrices contained in a single Ludlow matrix font afford the compositor a practically unlimited supply of that particular typeface and pointsize.

The font of Ludlow matrices shown in the case above is ready to use, without the delays and expense of type purchases or type manufacturing. The compositor can produce an unlimited amount of new typeface sluglines from one font of Ludlow matrices and still have available as much capacity for producing additional lines as when he began. This means more profitable operation for the Ludlow user, and a decided advantage over plants subject to the limitations of single type supply.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO-SEPTEMBER 11-23-1950

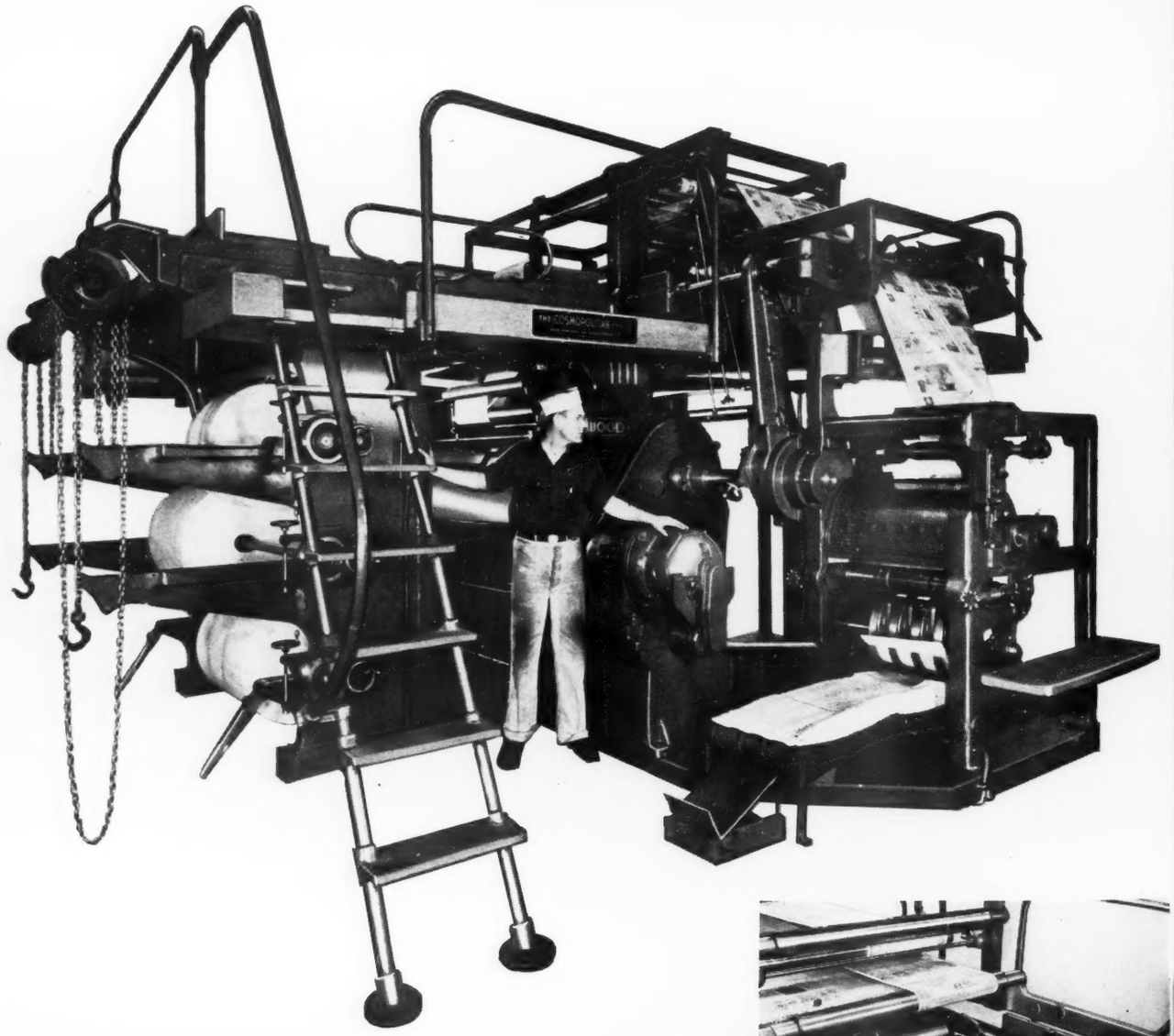


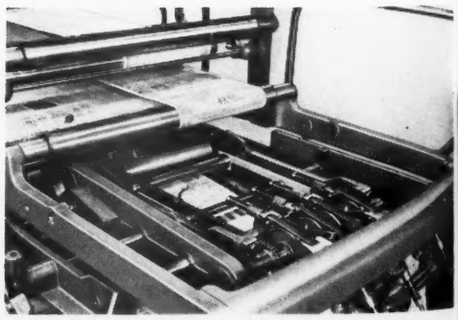
The Ludlow matrix cabinet of 20 cases gives maximum typeface resources in minimum floor area

Ludlow Typograph Company 2032 Clybourn Avenue, Chicago 14, Illinois

Set in members of the Ludlow Tempo family

DAILIES and WEEKLIES





INTRASERTOR makes 2-page jumps on collect runs possible. Positive control through link chain is a vast improvement over tapes, guides and friction devices.

IF IT'S Wood IT'S GOOD

offer Greater Reader service with the WOOD Cosmopolitan Press

A 40-page Cosmopolitan to the daily Daytona Beach (Fla.) News-Journal—a 24-page Cosmopolitan to the weekly Columbus (Ohio) Hilltop Record brings "big city" economy to these two fine smaller-city newspapers.

2-page jumps on collect runs, color facilities and printing from semi-cylindrical plates . . . all big city advantages . . . make these smaller-city newspaper plants faster, more versatile than any plant in the smaller-city field today!

Every practical advantage proved by research on large metropolitan presses has been incorporated in the Cosmopolitan Press, making it completely standard from paper roll to delivery . . . a thoroughly sound investment for any smaller-city newspaper.

WRITE FOR FULL INFORMATION

The Sunday News-Journal
Southerners Plan For All Out War On FEPC
WHICH SHOULD BE "A DOG'S LIFE?"
Seabreeze Band Gets 2 More Rates
TWO SENATORS CANCEL ACTION ON COMMITTEES TO FIGHT BILL
FLOODS CRUSH WINNIPEG DYKES
"Be Kind To Animals" Week Begins Today
ABSENTEE VOTES MUST BE SIGNED
Community Is Invited To Halifax Hospital
The Hilltop Record
Hillards School Addition Completed
Heated Contests May Bring Large Primary Turnout
Cunningham Offers Voting Record In Dailey Attack
Seek To Oust Koontz From City Council
Community Council To Make Survey

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD, NEW JERSEY • SALES OFFICE: 501 FIFTH AVENUE, NEW YORK 17

chemco

CAMERAS
CHEMICALS
FILMS

DARKROOM EQUIPMENT
DEVELOPING EQUIPMENT
PRINTING EQUIPMENT
ETCHING EQUIPMENT

STRIPPING EQUIPMENT
SENSITIZING EQUIPMENT
TOOLS AND SUPPLIES
CARBON TISSUE

PHOTO MECHANICAL EQUIPMENT AND SUPPLIES

CHEMCO CONTROLLED TEMPERATURE DARKROOM SINK

It makes *no* difference whether it's summer or winter! It makes *no* difference whether it's hot or cold outside or in the darkroom. It makes *no* difference whether your incoming water supply is warm or cold.

A flick of a switch and this Chemco unit is in operation. Set the dial to the temperature desired . . . and that's *exactly* the water temperature (plus or minus ½° F) you'll get, *fast!*

The Chemco Controlled Temperature Darkroom Sink (Model 910) offers *much more* than unequalled control:

ECONOMY Counterflow Heat Exchanger, using drain water, reduces cooling and heating loads to half!

EFFICIENCY Cools 40 gallons per hour from 85°F to 60°F and heats 40 gallons per hour from 40°F to 75°F.

CONVENIENCE Swirl jets keep sink water in constant motion to prevent stratification . . . single dial control of heater-cooler unit prevents simultaneous operation . . . ample storage space . . . removable center wash tray has separate drain.

LONG LIFE Entirely corrosion-proof with Stainless Steel working surfaces, splashboard and trays. (Stainless steel processing trays are extra.) Cabinet is aluminum and aluminum covered construction finished with Chemco Green Lacquer.

Chemco Controlled Temperature Darkroom Sink Model 910

Chemco Controlled Temperature Darkroom Sink Model 911 is identical to Model 910, but without the heater-cooler unit. Instead, it is equipped with pressure equalized thermostatic mixing valve, and is for use where cool (65°F or less) water is available the year round.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-23 · 1950

THERE ARE NUMEROUS IMPORTANT ADVANTAGES EMBODIED IN THIS CHEMCO UNIT . . . BE SURE TO LEARN *ALL* THE FACTS!

chemco PHOTOPRODUCTS COMPANY, INC.
FACTORY AND GENERAL OFFICES GLEN COVE, N. Y.
BRANCHES: New York, Chicago, Detroit, New Orleans, Boston, Atlanta, Dallas

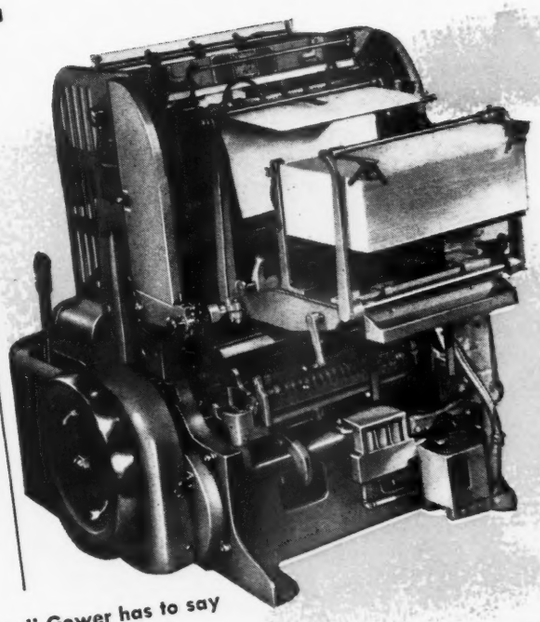
CHEMCO PHOTOPRODUCTS CO., INC. PE-7
GLEN COVE, N. Y.
Gentlemen: I am interested in learning more about your following products:

Name
Firm Name
Address
City State

It's The Same Story!

From Every New Vertical User . . . .

"WE WISH WE'D BOUGHT ONE YEARS AGO!"



That's what H. A. "Pop" Gower has to say about the

MIEHLE V-50 VERTICAL

Mr. Gower, President of the Gower Printing & Office Supply Co., Meridian, Miss., also declares that there has not been a month since their Vertical was installed that it has not paid its own way in additional work produced.

Their experience is typical of thousands of printers who say that they wish they'd installed it sooner. Don't wait for profits. Write today—find out how easy it is to own the new, improved Miehle V-50 Vertical.

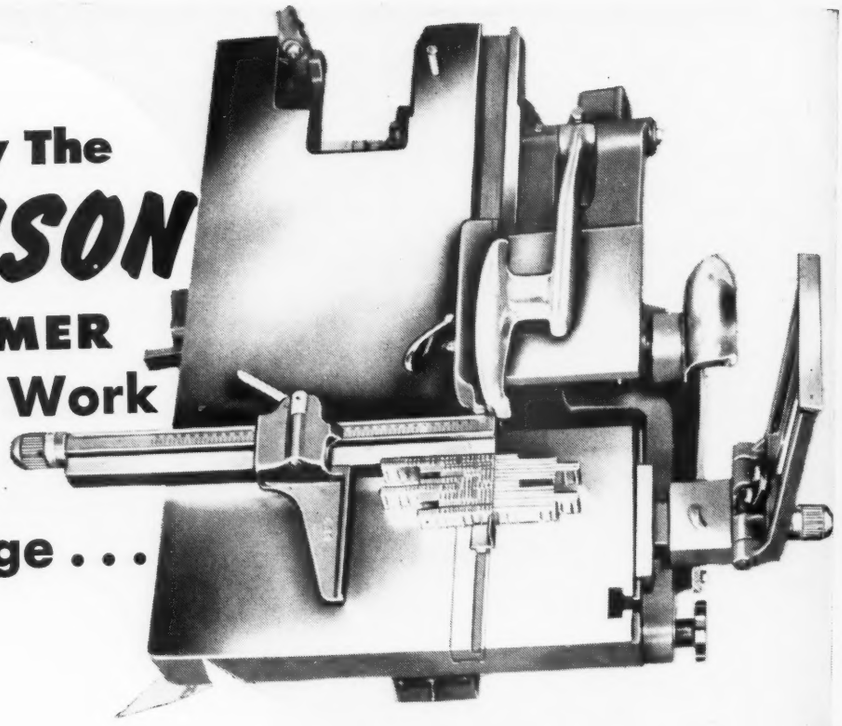
the Miehle

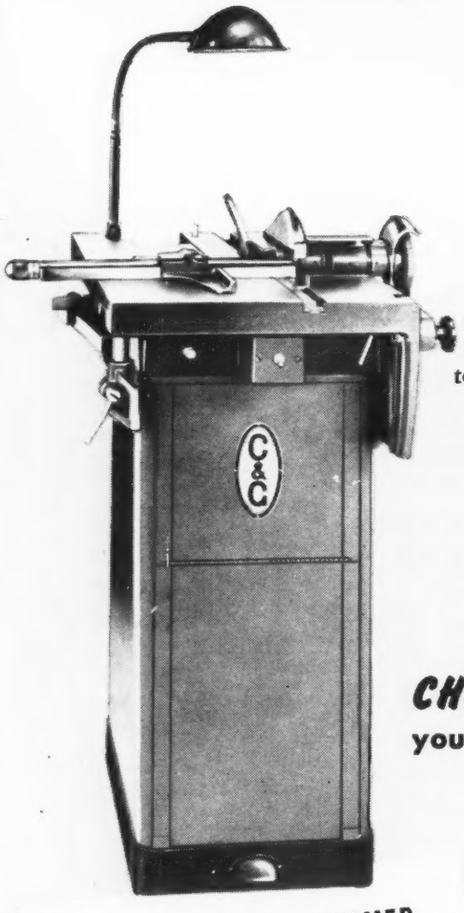
MIEHLE PRINTING PRESS AND MANUFACTURING CO.

World's Largest Manufacturer of Sheet Fed Presses

CHICAGO 8, ILLINOIS

Here's Why The MORRISON SAW TRIMMER Clamps Your Work BEHIND The Gauge . . .





Improved visibility, easier handling, greater accuracy—they're all important when you're trying to cut the corners in time and labor on sawing, trimming, angle or miter work in your composing room. These are some of the advantages of Morrison's radically different method of saw trimming — clamping your work *behind* the gauge, closer to the operator. You, too, will prefer this newer method because it speeds up work and is safer. The pull of the saw blade holds the slugs more compactly, instead of fanning them or causing them to buckle or jump.

See . . . try a new MORRISON SAW TRIMMER. You, too, will agree that it "obsoletes all the others." We'll be glad to tell you the names of users in your vicinity — or send you a descriptive folder "Essential to Composing Room Economy," telling how MORRISON SAW TRIMMERS will save money in your composing room.

CHECK — Only Morrison Saw Trimmer gives you ALL these exclusive features:

- Miter Gauge with Point Adjustment
- Patented Universal Saw Blade, with Saw Grinding Attachment
- Right and Left Hand Mitering — all Miters face up
- Miter and Lineup Gauge
- Any Angle Gauge
- Automatic Index for Plate Cutting and Trimming Positions
- Swing out 135 Pica Extension Gauge
- Advanced Clamping Method

MODEL 3-A SAW TRIMMER

Handles an amazing variety of work. Table 30" x 18". Smaller Model 45 with 18" x 27" table has famous "Pistol Grip" for trigger-speed saw blade adjustment.

Symbol of Operating Economy

THE MORRISON COMPANY MILWAUKEE WIS.

THE *Morrison* COMPANY

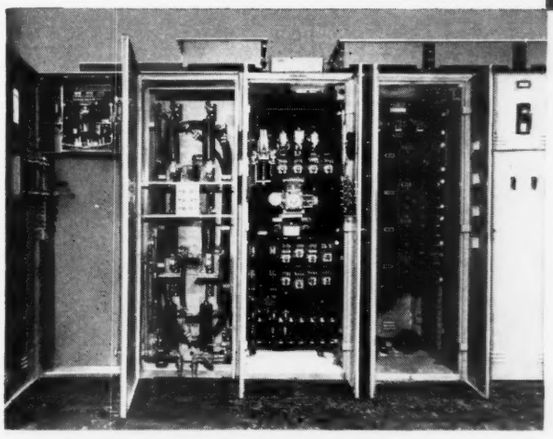
PRECISION MACHINES FOR THE GRAPHIC ARTS INDUSTRY

125 W. MELVINA STREET • MILWAUKEE 12, WIS.

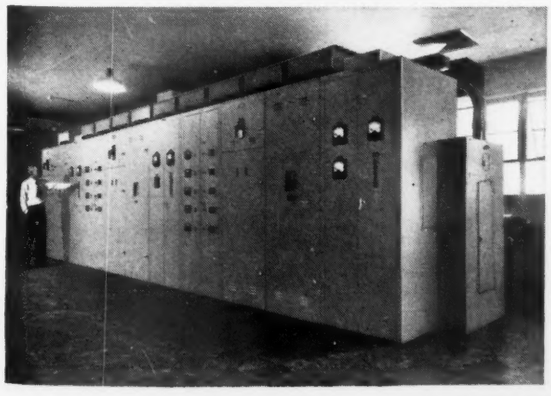
Times-Mirror Press Says:

ELECTRONIC PRESS DRIVE cuts power costs

Electronic drive motor arrangement looking upward from reelroom floor of Times-Mirror Press, Los Angeles. Nine 40-hp 550-volt d-c force-ventilated drive motors co-axially mounted.



Interior view of control cubicles for operating one press. More units can be added easily to this block.



Electronic drive control room of the Times-Mirror Press showing equipment for operating three presses.

Installation Costs Also Reduced to a Minimum

"The new General Electric electronic press drive recently installed in our plant cuts power costs because it operates efficiently at all speeds. There's no efficiency drop at low speeds, and no power lost in secondary resistor heat," says J. A. "Johnny" Johnson, Chief Electrician of the Times-Mirror Company, Los Angeles.

"Installation costs were also reduced to a minimum. Putting in the drive was fast and easy because there is no need for extra threading motors, reduction gearing, overrunning clutch, or drive brakes—one motor on each unit does it all. Installation of control was no problem because the cubicles came from the factory already assembled and wired and needed only to be bolted down and interconnected."

For more information on this outstanding new system . . . "the press drive of the future" . . . mail the coupon below . . . today!

Section D653-5 Apparatus Department
General Electric Company
Schenectady 5, N. Y.

Please send me your bulletin, GEA-4670, "Now Electronics Drives Printing Presses."

Bulletin needed for: ..... Reference purposes
..... Planning immediate project

Name ..... (Please Print)

Company .....

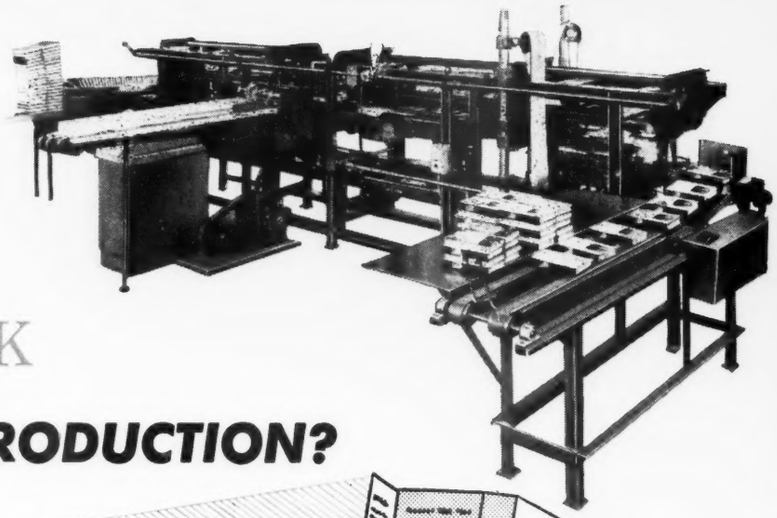
Position .....

Address ..... Zone ..... State .....

City .....

GENERAL ELECTRIC

DOES JACKETING CONSTITUTE A BOTTLENECK in your **BOOK PRODUCTION?**



THE new Dexter-de Florez Jacketing Machine applies jackets at a rated speed of 3500 to 4000 books per hour, creasing them around covers and delivering a quality of finished work surpassing that of careful manual operation.

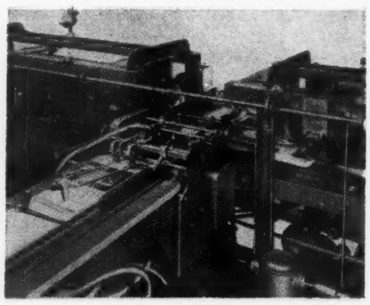
Jacketing costs come down as much as 50%. Inspectors are freed to concentrate on *inspecting*, which means a further decrease in production costs and a substantial increase in number of books jacketed and inspected over any given period.

Books are propelled through the machine by chain pushers. Covers are opened and jackets are applied—and wrapped by twisting canvas belts. Wrap may be controlled to any desired tightness.

As books advance, jackets are creased and books are closed and delivered to discharge conveyor. Conveyor speed may be varied to deliver books interleaved—or one by one, at any desired spacing.

The Dexter-de Florez Jacketing Machine is rugged, built for long, trouble-free service. It is also simple, easy to adjust, hence economical for use on *short* runs, as well as long; is powered by ¾ H. P. motor, through special safety clutch and brake; occupies about 21′ x 9′ of floor area.

If jacketing is currently a slow and expensive operation in your plant, you will do well to write for further information about this remarkable time and labor saving machine.—Please address



Books and jackets are fed in automatically, the former from hopper, which can be loaded to permit uninterrupted operation—the latter by a Cleveland continuous automatic feeder.

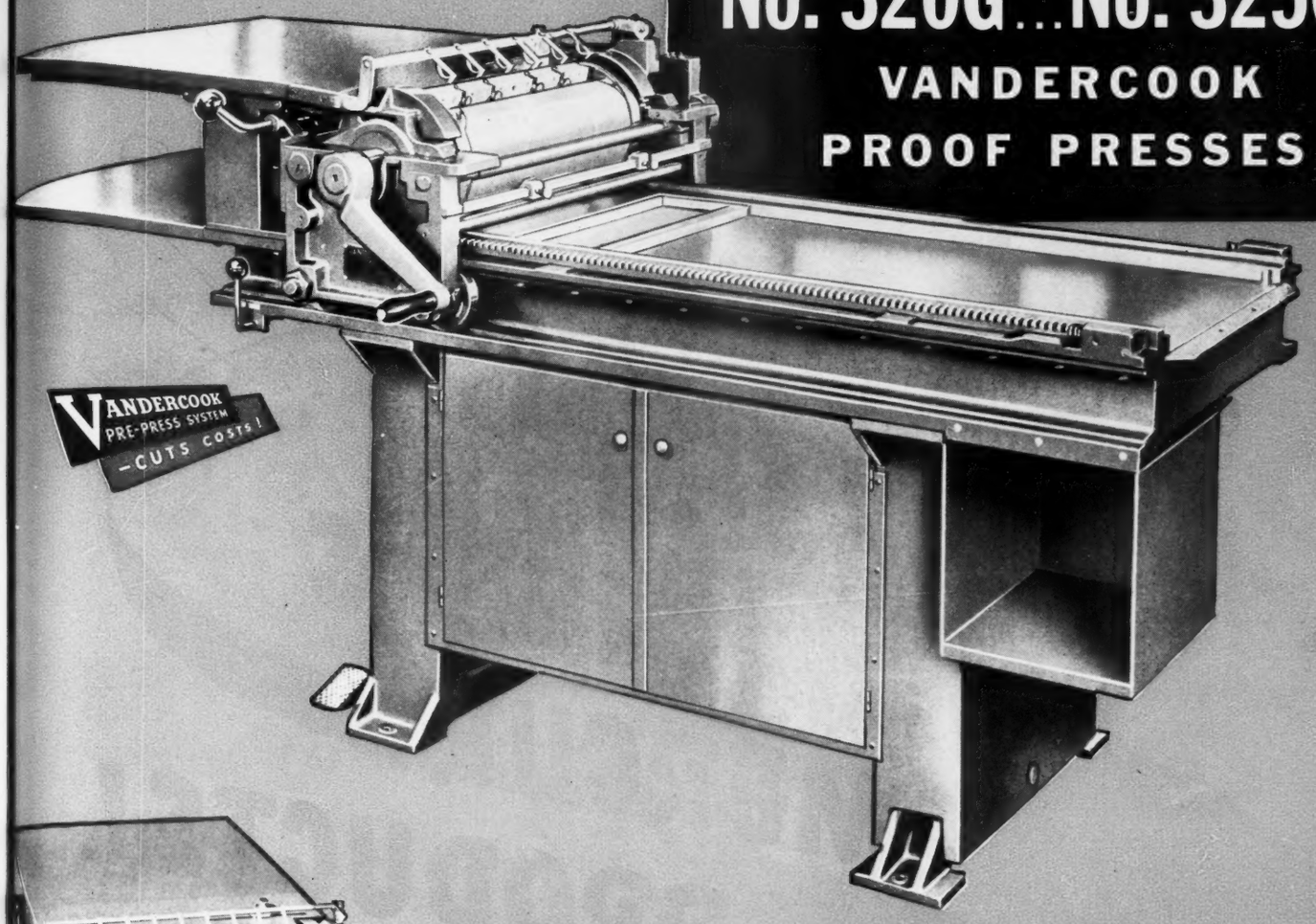
Delivery includes table, on which books may be stacked temporarily—for backing, facing and skidding. Where books are to pass immediately to subsequent operation—as cartoning, interleaved delivery permits removal by one person.

Dexter Folder Company

General Sales Offices

330 WEST 42nd STREET • NEW YORK 18, N. Y.

No. 320G...No. 325G
VANDERCOOK PROOF PRESSES



...erican
...ounders
...se three
...n other
...rcook
...presses.

An Ideal Proof Press for Commercial Shops

Produces excellent proofs rapidly of run-of-the-hook work in a wide range of sizes. Has automatic cylinder grippers and inking and, for quantity production, can be equipped with an automatic delivery and fountain. This model comes in two sizes —No. 320G is 20″ between bearers; No. 325G is 25″. Both print forms up to 24½″ long and handle sheets up to 27″ in length.

The same press adapted to NEWSPAPER PLANT USE

No. 325A is the larger size of the press shown above with raising blocks to level the bed with make-up trucks, and adjustable bed plate for easy transfer of form to and from truck. Proves a full newspaper page in type high stereotype chase without printing the chase. Can be equipped with automatic sheet delivery and an ink fountain for speed.

Ask your ATF Representative or nearest ATF Branch Office for further information

American Type Founders

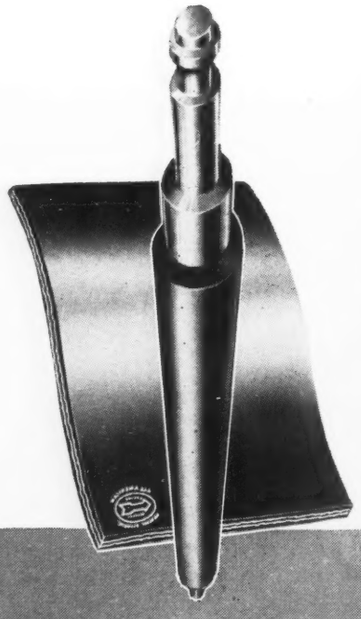
200 Elmora Avenue, Elizabeth 8, New Jersey

Branches in Principal Cities

ATF Associate

Manufacturers of Kelly Presses, Little Giant Presses, Chief Offset Presses, Web-fed Offset Presses, Gravure Presses, Foundry Type and Process Cameras.

Distributors of Vandercook, Challenge, Chandler & Price, Hamilton and Rosback Equipment for Composing Room, Pressroom and Bindery.



Why all the applause? Because Mercury Rollers and Blankets always give a star performance. You'll find they provide more uniform impressions . . . save time on makeready and wash-up . . . reduce paper spoilage . . . and deliver more mileage. Once you're a Mercury *user*—you become a Mercury *fan*.

FOR ALL GRAPHIC ARTS PROCESSES

RAPID ROLLER CO.
FEDERAL AT 26TH
CHICAGO 16, ILL.

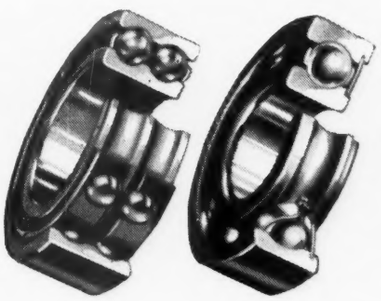
D. M. RAPPORT
PRESIDENT

NO "STUBBLE" WHEN WOOD

AUTO SHAVERS DO THE JOB

. . . bearings engineered by SKF

Wood Heavy-Duty Auto Shavers, built by Wood Newspaper Machinery Corp., have earned an outstanding reputation for long life and dependability in shaving stereotype plates with unmatched precision. SKF Bearings . . . a total of 67 on each unit . . . do much to help the Auto Shaver maintain its reputation for dependability through years of hard service. They need no attention save infrequent lubrication, work hard and faithfully throughout the life of the machine. Nor is SKF's contribution to the printing industry confined to auxiliary equipment. SKF is hard at work on all types of printing presses where the SKF Self-Aligning Printing Cylinder Bearing plays a vital role in increasing all-round efficiency. **SKF** INDUSTRIES, INC., PHILADELPHIA 32, PA., *the Pioneers of the Deep Groove Ball Bearing, Spherical Roller Bearing, Self-Aligning Ball Bearing.* 7102



SKF

BALL AND ROLLER BEARINGS

8 REASONS WHY SKF IS PREFERRED BY ALL INDUSTRY

Integrity · Craftsmanship · Metallurgy · Tolerance Control · Surface Finish · Product Uniformity · Engineering Service · Field Service

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-23-1950

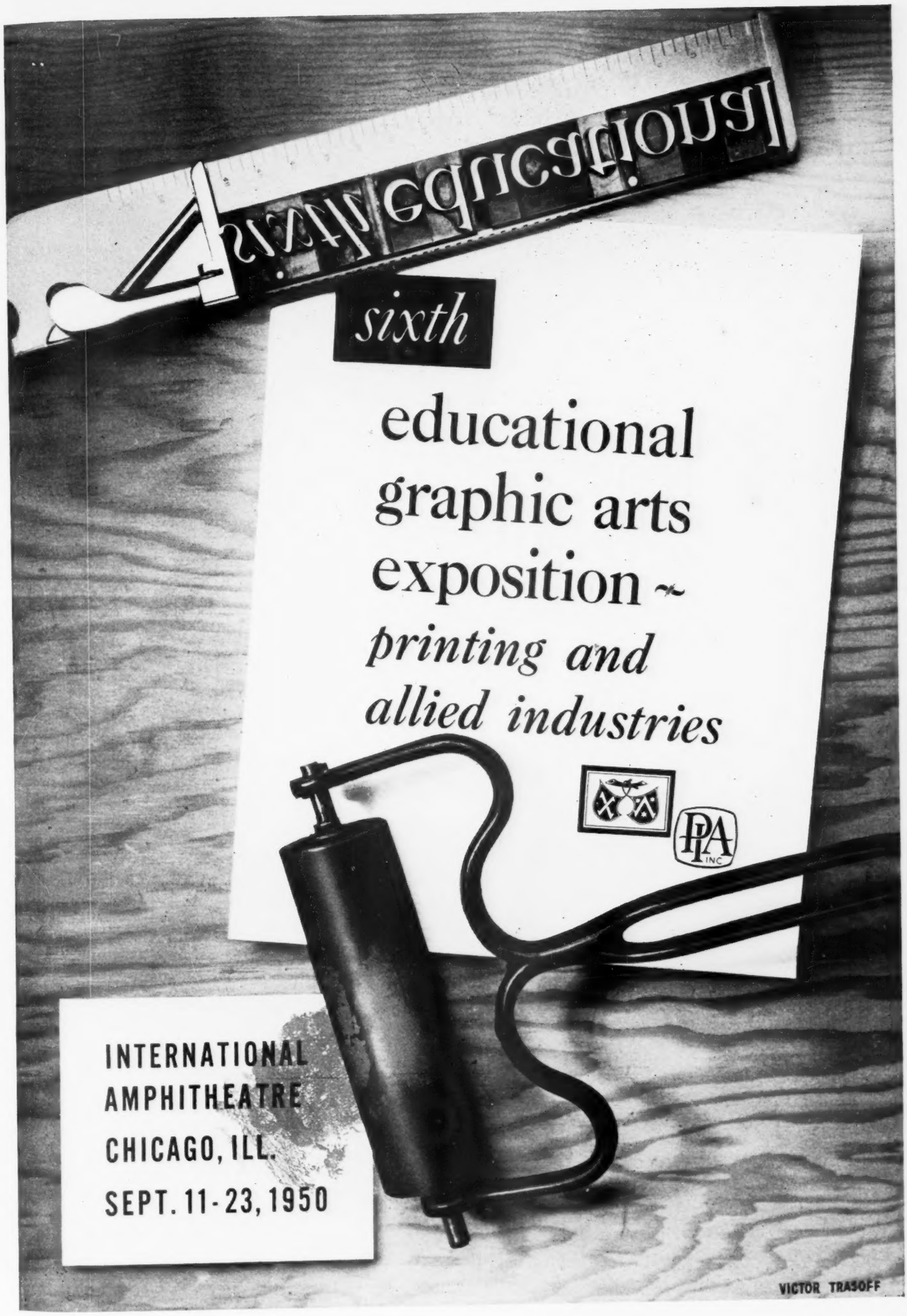
Printing is on the march. New processes, new equipment, new methods, have been spurred by economic conditions. Increasingly, these factors will compel the practice of scientific printing methods with scientifically designed equipment.

Printers who keep in step with the times will be prepared to profit by the new pattern of progress. They inevitably will outstrip those who cling to old fashioned methods and obsolete machines.

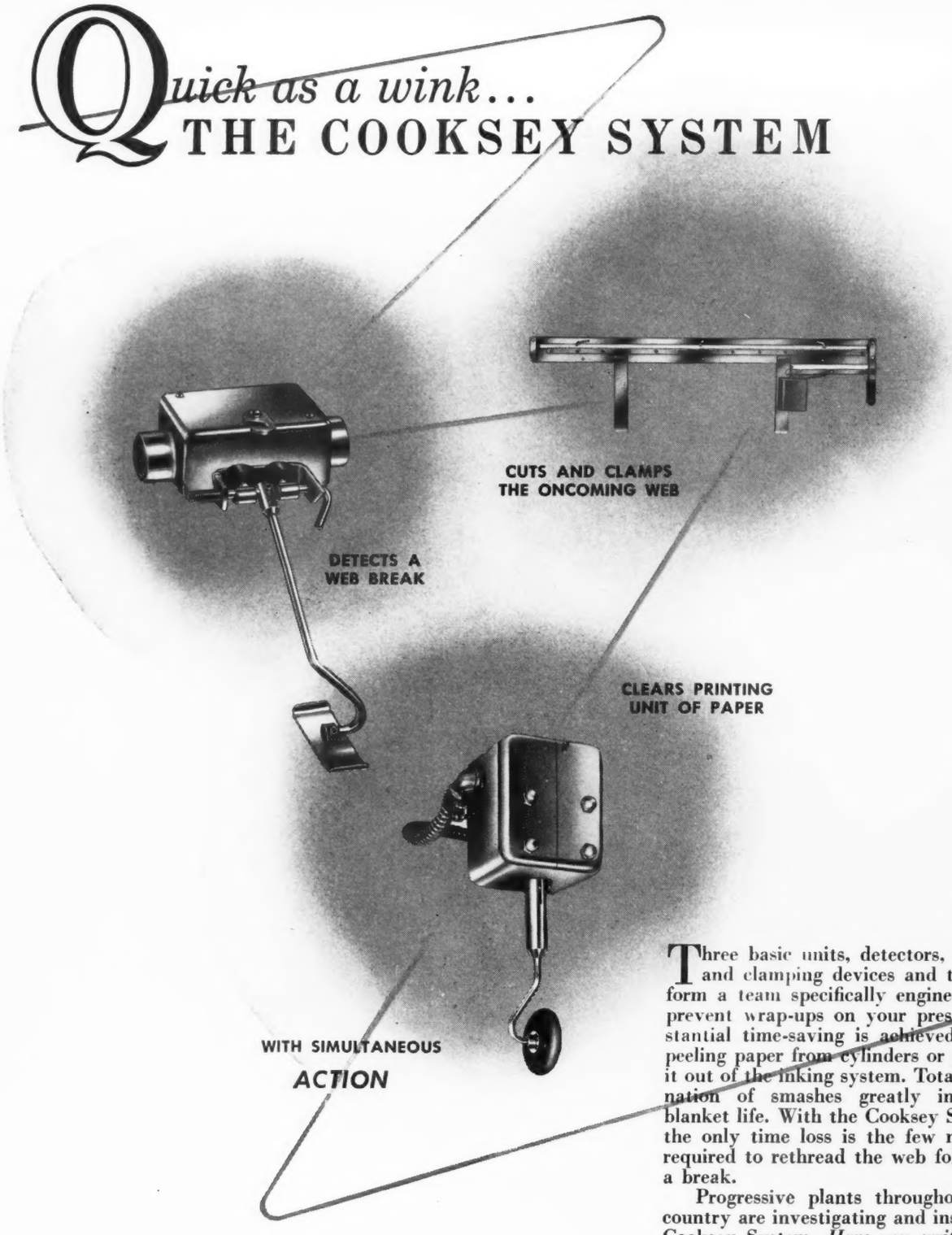
This evolution will come fast; for the means are now available. They will be assembled and demonstrated at the Chicago Graphic Arts Exposition. At the ATF exhibit, the latest in letterpress, offset, gravure, cameras, photocomposition and type will be shown. Equipment that will enable printers to keep out front in this march of printing progress.

Be sure to ask your ATF Representative about the modern equipment ATF now offers to help you cut costs, speed production, improve quality, expand your markets and materially increase your profits.

AMERICAN TYPE FOUNDERS
200 ELMORA AVENUE, ELIZABETH 3, NEW JERSEY
Branches in principal cities


sixth
educational
graphic arts
exposition ~
printing and
allied industries
PIA
INC
INTERNATIONAL
AMPHITHEATRE
CHICAGO, ILL.
SEPT. 11-23, 1950
VICTOR TRASOFF

Quick as a wink... THE COOKSEY SYSTEM



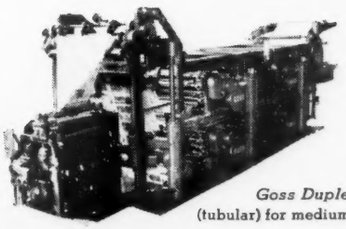
Three basic units, detectors, cutting and clamping devices and trolleys, form a team specifically engineered to prevent wrap-ups on your press. Substantial time-saving is achieved . . . no peeling paper from cylinders or picking it out of the inking system. Total elimination of smashes greatly increases blanket life. With the Cooksey System, the only time loss is the few minutes required to rethread the web following a break.

Progressive plants throughout the country are investigating and installing Cooksey System. *Have you written for your copy of our folder describing its operation?* IF NOT, DO SO RIGHT NOW.

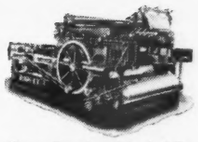
Collmar Corporation

35 E. WACKER DRIVE, CHICAGO 1, ILLINOIS

SALES AGENTS: Goss Printing Press Company, CHICAGO; R. Hoe & Company, Inc., NEW YORK CITY; Wood Newspaper Machinery Corp., NEW YORK CITY



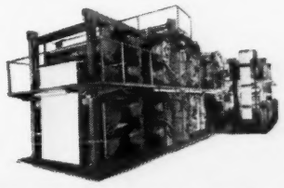
Goss Duplex Dek-A-Tube (tubular) for medium-size daily newspapers.



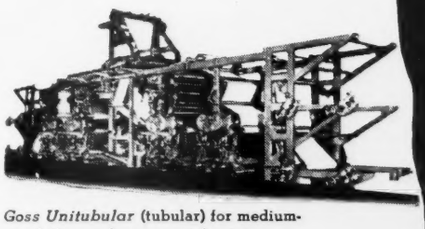
Goss Duplex Model E (flat-bed) for semi-weekly, small daily newspapers.

Goss Cox-O-Type (flat-bed) for weekly semi-weekly, small daily papers.

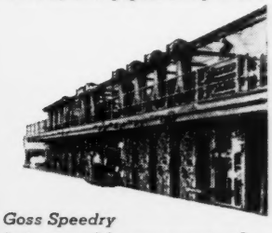
Goss Unitube (tubular) for medium-size dailies.



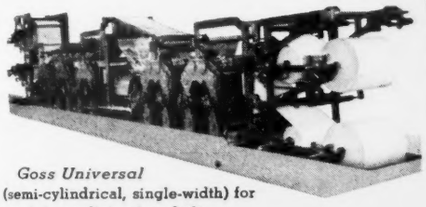
Goss Multi-Color (high speed) for color comic sections and supplements, etc. Used by newspapers and printers.



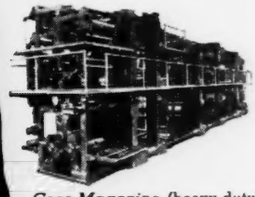
Goss Unitubular (tubular) for medium-size dailies and commercial printers.



Goss Speedry (rotogravure) for newspaper and commercial colorgravure work.



Goss Universal (semi-cylindrical, single-width) for intermediate class dailies.



Goss Magazine (heavy duty) for high speed commercial printing of magazines.

MOST COMPLETE LINE OF ROTARY PRESSES EVER BUILT

FOR NEWSPAPER AND MAGAZINE PUBLISHERS

THE GOSS PRINTING PRESS COMPANY
1535 S. Paulina St., Chicago 8
Duplex Division: Battle Creek, Mich.
Goss Printing Press Co. Ltd., Preston, England

it's **GOSS** *again*

Goss Headliner (high speed, multi-color) for large metropolitan dailies.

Linecasters

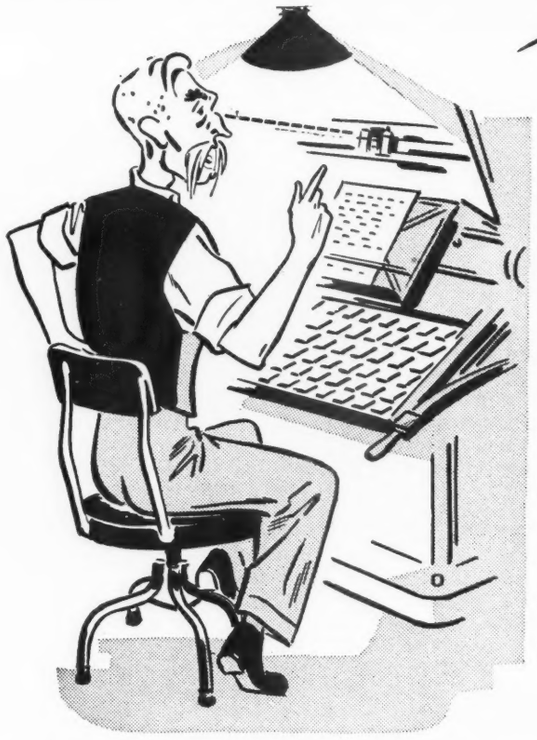
"see-what-they-set"

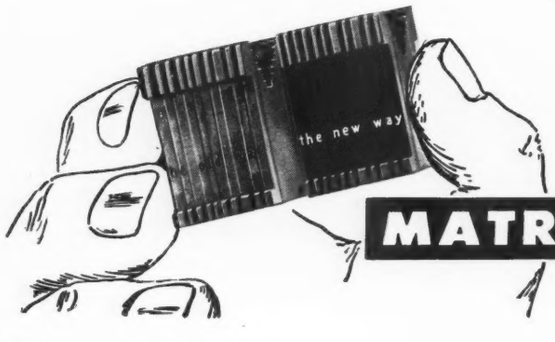
with

MATRIX CONTRAST SERVICE

Linecasters swear by Matrix Contrast Service because the highly increased visibility of the processed reference marks enables them to "see-what-they-set" *without* eyestrain. The reduction of approximately one-third of all errors in linecasting machine operation means valuable time saved not only in machine and operator time, but also in time of proofreaders, floormen and others.

Operators have also taken to the new Matrix Contrast Colors to aid them in the detection of wrong fonts and to insure trigger-quick selection of matrices from "pi" stackers and trays. Colors such as red, green, yellow and orange can be applied to old as well as new matrices ... in the same manner as the original Black and White serviced matrices and without any additional charge. Write, wire or phone the number of machines in your plant. We will give you full data promptly and without obligation.





MATRIX CONTRAST CORPORATION, 154 West 14th St., New York 11, N. Y.—326 W. Madison Street, Chicago 6, Ill.—1105 Trenton Street, Los Angeles 15, Calif. — Sole licensees of the Percy L. Hill Matrix Contrast Patent No. 1,796,023, other patent pending. European Agents: Funditor, Ltd., 3 Woodbridge Street, Clerkenwell Green, London, E. C. 1.

MATRIX CONTRAST SERVICE

Copyright 1950, Matrix Contrast Corporation

Research & Engineering Council

over the hump with respect to demonstrating its utility in Graphic Arts industry—Now an incorporated body — Organization burgeons with varied industry cooperation.

By MacD. SINCLAIR

WHAT was announced as the first annual business meeting of the Research and Engineering Council of the Graphic Arts, took place in Milwaukee on Thursday, June 23 at Milwaukee Athletic Club. The Council, however, has held a number of informal semi-annual sessions in Columbus, O., Detroit, and in Rochester, N. Y.

The meetings were held as follows: Tuesday, June 20, Publications Committee; Wednesday, June 21, Planning, Executive and Paper Research Committees; Thursday, June 22, Council Business Meeting; Friday, June 23, visit to Institute Paper Chemistry, Appleton and Kimberly-Clark Laboratories, Neenah.

Some 90 executives interested in Council activities attended the Milwaukee meeting.

Major Actions

Among the major actions taken at the Thursday, (June 22) business meeting were:

(1) Approval of incorporation of the Council under the laws of the State of Illinois,

(2) Approval of By-Laws for governing the Council,

(3) Elected a full slate of officers and executive committee members,

(4) Heard and approved reports of various chairman regarding cooperation of interested groups within the Graphic Arts Industry with respect to coordination of research, refinement of methods and technological problems,

(5) Took a trip in a body from Milwaukee and spent the entire day, Friday, June 23 in Appleton and Neenah, Wis. In the morning members of the Council were guests of the Institute of Paper Chemistry, Appleton. First, Council members assembled in the IPC Laboratory Auditorium, John G. Strange, Secretary-Treasurer of the Institute, explained the organization and objectives both of Lawrence College and the Institute. Afterwards, a number of guides from the Institute staff escorted small groups through the laboratories. The Institute, affiliated with Lawrence College, is a graduate school devoted entirely to the study of pulp and paper chemistry and technology. The Institute, according to its catalog, fills three definite needs of the pulp and paper industry: (a) Trains technical men through a period of graduate study to assume responsible positions in the industry; (b) Maintains a research library for use of the Institute and the industry as a whole, and (c) Maintains a research center where the latest scientific equipment and knowledge is accumulated and made available to the industry and where researches are carried on in both fundamental and applied problems.

Support for the Institute is provided by pulp and paper mills in 34 states. Additional financial support is received through fellowships and scholarships established by individuals and companies, through researches from patents resulting from researches carried on at the Institute, and through funds obtained from the contractual relations existing between the Institute and member mills and various firms in allied industries. The buildings and equipment of the Institute are valued at approximately $1.5 million.

(6) During the afternoon of Thursday, June 23, the Council members were escorted through the Kimberly-Clark Research Laboratories in Neenah. The visitors were broken up into groups of five each under the supervision of a guide. The two-hour tour was conducted with clocklike precision. Before the trip, the Council members assembled before a microphone on one of the lawns near the laboratory buildings where J. B. Catlin, Merchandising Mgr., welcomed them and described what they would see in the laboratories. The methods used in the manufacture of paper and the scientific control methods and equipment used in the Kimberly-Clark plants were explained and demonstrated. One of the newest instruments developed in the Physics Laboratory is the Dirt Counter (Berkley Counter) in which representative samples of paper are exposed electronically to record on a chart the imperfections existing in the surface of the paper. Another interesting department is that of Customer Relations where scrupulous attention is given to the needs and problems of users of Kimberly-Clark paper. It is impossible in the space allotted in this report to describe all of the laboratory demonstrations and the care taken by the company to assure users of a constant product as well as the development of new techniques to improve paper products. A trip like this is required to impress executives in the Graphic Arts Industry as to the lengths to which Kimberly-Clark goes to maintain intimate relationships between customer and company. In reality, one gets the impression that the company is a very human entity.

At Port Washington

En route to Appleton on Thursday evening, Council members were guests of the Graphic Arts Association of Milwaukee at a cocktail party held at the Port Washington Country Club. Arthur

STATESMANSHIP PREFERABLE

Immediately after the trip through the Kimberly-Clark Corporation's Technical Center Laboratories in Neenah, Wis., on Friday, June 23, members of the R&E Council were seated in a body on one of the lawns.

Speaking to them through the microphone was Dr. H. A. Rothchild, Technical Director, who summarized the escorted trips and who also mentioned Kimberly-Clark's wish to have its laboratory organization cooperate with other scientific groups in the Graphic Arts industry.

Among remarks made by Dr. Rothchild in effect, were the following: "Petty politics dictates that if we opened our laboratories we would have much to lose. Statesmanship, however, indicates we have everything to gain by interchange of ideas."

Research and Engineering Council Visits Technical Center of Kimberly Clark Corporation, Neenah, Wis.

On Friday, June 23, approx. 50 members of the Council traveled from the Milwaukee meeting to visit the Institute of Paper Chemistry in Appleton and the Kimberly-Clark Laboratories in Neenah.

Council members were divided into small groups; each group was conducted through the Technical Center by a Kimberly-Clark scientist.

In this picture, Dr. M. N. Davis (left), Associate Technical Director of Kimberly-Clark, is explaining laboratory model of a dirt counter (Berkley counter) in the Physics Laboratory. Commencing second from left are: Bernard J. Taymans, Asst. General Mgr., Printing Industry of America, Inc.; E. J. Triebe, Vice Chairman of Research and Engineering Council and General Supt. of Kingsport Press, Kingsport, Tenn.; Frank F. Pfeiffer, Council Chairman and Vice President of Reynolds and Reynolds Co., Dayton, O.; William A. Maull, Director of Sales Service, Mead Corporation, Chillicothe, O.; J. Homer Winkler, Technical Advisor, Battelle Memorial Institute, Columbus, O.

Visiting Council members, under the supervision of Kimberly-Clark research men saw, among other things, a supercalender, basic weight scanner, dirt counter, rotary rupture tester and a paper customer acceptance laboratory; immediately following, Council members visited experimental mill to see other manufacturing exhibits and techniques, including a suction roll silencer, a pilot plant paper coater and a hydraulic exhibit.

Wetzel, Wetzel Brothers, Milwaukee, and John R. Schultz, manager of the Graphic Arts Association of Milwaukee, assisted in arranging the Milwaukee meetings and helped make the Council members' stay at the Athletic Club a pleasant one.

Pfeiffer Reports

During the course of the Business meeting in Milwaukee on Thursday, June 21, Chairman Pfeiffer of the Executive Committee, presided. Among his announcements are: (1) Vol. 1 of the Research and Operations Manual contains 17 separate reports. Vol. 2 has been started with Bulletin RS-2. (2) The Intl. Assoc. of Electrotypers and Stereotypers presented 750 copies of its publication, *Basic Requirements for Electrotypes*, for distribution to the membership of Printing Industry of America, Inc. (3) A brochure will be prepared for distribution at the September Graphic Arts Exposition, in which will be explained the aims and objectives of the Research and Engineering Council. (4) A monthly bulletin will be published in which will be included activities of the Council. (5) The function of the Council acting in an advisory capacity to research groups will be continued. (6) Mr. Pfeiffer announced appointment of Ken P. Morse, Executive Vice President of The Standard Register Co., Dayton, O., as Chairman of the Overall Plate Committee. (7) On September 19, at the Palmer House, Chicago, the Research and Engineering Council will co-sponsor clinics during the PIA convention.

Evaluation Function

It seemed the only controversial subject to arise at the R&E Council meeting was that of the evaluation of equipment, processes and methods. The matter of the Council endorsing evaluations by committees was held in abeyance for the time being. Chairman Triebe of the Planning Committee, however, stated that when such reports are presented they would contain the minority as well as the majority reports of committees. In any event, if such reports are to be published both the majority and minority reports will be included.

Research Projects Listings

At the Business session of the Council, it was announced that the Council had published a new and revised list of Research and Engineering Programs throughout the country. This edition contains listings of 264 programs pertaining to the Graphic Arts. The bulletin, RS-2, will be distributed to subscribers to the Research and Operations Manual.

Definite Evidence of Group Cooperation

DURING meetings of the Planning and Executive Committees of the R&E Council and during the business meeting of the Council itself, reports were received with respect to cooperation by and between different groups within the Council, the objectives being to coordinate work between different groups, and also the coordination of work by two groups having mutual interests. While details are not yet available, the following activities were reported:

One of the highlights of the Council's business meeting was a report on the conference of the Platemaking section held in Columbus, O., last February at Battelle Memorial Institute. This meeting was attended by 90 research, printing plant and manufacturer executives from the photoengraving, offset, gravure, electrotype, stereotype, plastic, rubber, and steel die platemaking and the screen process fields.

MISINTERPRETATIONS

Some good natured ribbing occurred at the recent Research and Engineering Council meeting. Otherwise dignified management, research, production and mechanical executives (with and without degrees of various kinds) unbent momentarily to enjoy offside interpretations of the meanings of scientific degree abbreviations, as follows:

Said one: "Everybody knows what B. S. means; M. S. means more of the same, and Ph. D. means piled high and deep." This was followed by another interpretation: "M. D. means moderately dumb; Ph. D. means phenominally dumb, and I'll leave it to your imagination as to the meaning of D. D."

Much gratification was expressed by Council members regarding the willingness of representatives of all platemaking processes to speak freely to each other about their individual problems. Heretofore, as most everybody knows, men in each of these industries have regarded their industries as separate industries without feeling it was necessary to consult or cooperate with any or all of the other platemaking groups.

In making his report to the Business Session, Edward J. Triebe, Chairman of the Planning Committee, stated that one function of the Planning Committee is to coordinate the work of various groups and to act as a catalyst with respect to the objectives sought. He referred to the report of Elliott Donnelley, Chairman of the Materials Handling Committee before the Planning Committee which was given previously. Mr. Donnelley reported success in securing the interest of the printer, the paper manufacturers and the American Association of Railroads with respect to proper packing of paper skids and rolls and the loading of cars to avoid damage in transit to the consumer.

Byron Wehmhoff of West Virginia Pulp & Paper Co., remarked offside that up until the present, printers have never had an organization to tell the papermakers jointly what they want. The Research and Engineering Council provides the means of communication. E. R. Duffie, Meredith Pub. Co., Des Moines, Ia., is Chairman of the new Paper Committee.

Another indication of the intent of related groups getting together was mentioned by Chairman Triebe of the Planning Committee. In this instance, the R&EC Bindery Committee will sit down with representatives of the Book Manufacturers Institute and delineate their problems.

Mention was also made that an actual start had been made by certain ink and paper people with the idea of finding out what can be done to work jointly on mutual problems.

Committee Chairmen Report

DURING the Business meeting held on Thursday, June 1, Chairman Pfeiffer called upon a number of Research Committee chairmen to present reports of the activities and accomplishments of their committees. These are summarized as follows:

Paper Committee

On Wednesday night, June 21, the Paper Research Committee met at the Milwaukee Athletic Club under the chairmanship of E. R. Duffie, Meredith Pub. Co., Des Moines, Ia. Twenty-odd members attended. Chairman Duffie's report is that the committee will formulate a list of problems which the consumers of paper in turn will present to paper manufacturers.

Officers and Executive Committee Research and Engineering Council, Inc.

President and Chairman of the Executive Committee—Frank F. Pfeiffer, Vice President, Reynolds and Reynolds Co., Dayton, O.

Vice President and Chairman of the Planning Committee—Edward J. Triebe, General Supt., Kingsport Press, Kingsport, Tenn.

Vice President and Chairman of the Publications Committee—E. R. Duffie, Research Director, Meredith Pub. Co., Des Moines, Ia.

Secretary—J. Homer Winkler, Technical Advisor, Battelle Memorial Institute, Columbus, O.

Executive Committee—The Above Officers and

William Baumrucker jr., Production Mgr., Washington (D.C.) *Times-Herald*.

James R. Brackett, General Mgr., Printing Industry of America, Inc., Washington, D. C.

Carl G. Bingham, President, Sam'l Bingham's Son Mfg. Co., Chicago.

W. B. Burgard, Production Mgr., J. W. Clement Co., Buffalo, N. Y.

Joseph Chanko, General Mgr., The Conde Nast Press, Greenwich, Conn.

Hon. John J. Deviny, U. S. Public Printer, Government Printing Office, Washington, D. C.

Elliott Donnelley, R. R. Donnelley & Sons Co., Chicago.

G. L. Erikson, Vice President, Braden-Sutphin Ink Co., Cleveland.

Harold F. Fiedler, General Mgr., Printing Industries of Philadelphia, Inc., Philadelphia.

Ellsworth Geist, Sales Mgr., S. D. Warren Paper Co., Boston.

Wade E. Griswold, Executive Director, Lithographic Technical Foundation, New York.

Russell J. Hogan, President, Wilson H. Lee Co., Orange, Conn.

Morris S. Kantrowitz, Technical Director, U. S. Government Printing Office, Washington, D. C.

Raymond H. Lecraw, Consultant on Methods and Procedures, U. S. Government Printing Office, Washington, D. C.

C. A. Mawicke, Vice President, Pontiac Engravers and Electrotypers, Chicago.

Kenneth B. Morse, Executive Vice President, Standard Register Co., Dayton, O.

Clifford J. Murray, General Mgr., Triangle Publications, Philadelphia.

George Schlegel, III, Schlegel Lithographing Co., New York, N. Y.

Joseph Schwartz, General Mgr., Westcott & Thomson Co., Philadelphia.

Frank M. Sherman, Executive Director, Intl. Typographic Composition Assoc., Philadelphia.

B. L. Sites, Chief Research Engineer, Miehle Printing Press & Mfg. Co., Chicago.

Bernard Snyder, President, American Typesetting Corp., Chicago.

C. Howard Thomas, National Pub. Co., Inc., Philadelphia.

Dr. Wm. C. Walker, National Printing Ink Research Institute, Bethlehem, Pa.

A. S. Wentworth, Manager Printing Div., Westinghouse Electric Corp., Trafford, Pa.

Craftsmen's Convention Program

With present indications pointing to a large attendance, the 31st annual convention of the International Association of Printing House Craftsmen will be held at the Stevens Hotel in Chicago on September 10 to 13. Gradie Oakes, Intl. Past President, is serving as General Chairman of the convention, with Roy Kirby, President of the Chicago Craftsmen's Club, acting as Co-chairman.

Plans for both the general convention program and the special ladies program have been completed. All programs will include visits to the Graphic Arts Exposition at the International Amphitheatre, according to Program Chairman, Edward H. Christensen. Technical and business sessions, clinics, exhibits, hospitality tours, plant visitations, Exposition demonstrations, social affairs, and recreation will afford a thoroughly enjoyable convention stay in Chicago.

A special budget registration plan has been offered and is being handled by local club officials. The plan provides for the registration fees to be paid in four equal installments by the member to his local club secretary. When the member has made all payments, the local club secretary is to send the full registration fee and the registration blank to Clifford Johnson, Chicago Housing Chairman, 4829 S. Kedzie Ave., Chicago 32, Ill.

The special ladies program is being arranged under the direction of Mrs. Don Crews as Chairman. Luncheons, interior decorating lectures, sightseeing trips, drama, shopping tours, banquets, dancing, dinners, charm schools, attendance at the Breakfast Club and Welcome Traveler radio shows, hospitality hours, and visits to the Graphic Arts Exposition are scheduled for the ladies.

Picture Taken at Research and Engineering Council Meeting, Milwaukee Athletic Club, Thursday, June 22. Members of the group attending the luncheon in this picture were among the 100 who registered for the first annual meeting as an incorporated organization.

Roller Committee

Don Crews, Vice President, representing President Carl G. Bingham of Sam'l Bingham's Son Mfg. Co., reported that the membership of the Roller Committee will be expanded to include executives from the printing plant, ink and paper fields. Among other objectives, Mr. Crews stated the committee wants to develop standard specifications for roller cores.

Ink Research Committee

Dr. William C. Walker, National Printing Ink Research Institute, who is chairman of the Ink Research Committee, in line with the reports of the chairmen of other committees, stated the committee personnel is being expanded to provide a more balanced group, principally by inviting printers to membership. In turn, the printers will tell the committee what they need. Dr. Walker also reported a meeting of the Ink Research Committee to consider the problems of ink drying would be held on June 30 at Lehigh University.

Bindery Committee

Chairman Pfeiffer, because of the absence of Chairman C. Howard Thomas, asked Richard Squires of National Pub. Co., New York, to report for the Bindery Committee. He said the Bindery Committee had been organized into three divisions to study equipment, adhesives and methods. In the bindery process are incorporated about 80 operations. One of the committee's objectives is to develop counting equipment to settle arguments between the pressroom and bindery. He mentioned a predetermined counter recently developed by Veeder-Root and by another company. He asked Council members to write manufacturers to demonstrate there is a demand for automatic reset equipment.

Composition Committee

Joseph Schwartz, of Westcott & Thomson Co., reported for the Composition Committee in the absence of Chairman Bernard Snyder of the American Typesetting Corp. He said that at a meeting of the committee in Chicago on June 6 discussions were held to see what could be done about improving letter character alignment in composing machines. It was the feeling of the committee that present alignment standards are not good enough. He also stated that the committee has been investigating development of a light weight foundry chase with the lockup means built into the chase itself. He mentioned briefly other activities with respect to improving reproduction proofing methods, elimination of the causes of hair lines between letter characters, and modifying the trimming apparatus on composing machines to permit more accurate trim and to improve the casting apparatus to obtain sharper cast of characters and more solid slug bodies.

He spoke of the anticipated joint cooperation of the ITCA and R&EC to avoid duplication of objectives. A joint meeting of ITCA and R&EC members and manufacturer representatives will be held in Brooklyn at an early date.

Presswork Committee

The Presswork Research Committee report was presented. In Chairman Russell J. Hogan's report accomplishments of the committee were reviewed. A manual has been compiled treating press rollers, blankets, etc., which has been scheduled for publication by the R&E Council.

Also set into type and about ready for publication is a manual designated as EQ-1 containing general specifications for operating instruction manuals, parts catalogs, lubrication charts, and erection manuals relating to equipment (machines of all kinds) supplied to the Graphic Arts.

The report was sponsored by LTF and PIA, Inc., and was prepared by the committee with the cooperation of equipment manufacturers; it has been approved by the Publications Committee of the R&E Council. It represents the consolidated work of printing equipment manufacturers and the users of such equipment. It is designed to overcome printing plant difficulties arising from lack of adequate instruction manuals, parts catalogs and lubrication charts because of lack of uniformity of such material.

An authoritative treatise on static electricity has been prepared by Dr. Luther Vaaler of Battelle Memorial Institute. This will be published before long.

The committee is looking into the matter of inducing paper manufacturers to add an element in the making of paper to reduce or eliminate static electricity. An-

BANKERS CAN BE GRACIOUS

Four men attending the R&E Council semi-annual meeting in Milwaukee, June 20-23, gathered in Hotel Schroeder's lobby one morning. They entered the dining room and were greeted most cordially by a man who seemed to be the floor manager. A hostess cheerfully led the way through the crowded room and seated them at a table. Presto! Four cantaloupe halves were placed with precision before the R&E Council members. One of them, a well known Research man, mumbled: "Aren't we going to have anything to say about what we're going to eat?" Next with prompt service the cantaloupe shells were whisked away and plates of sausage with scrambled eggs and a generous plate of toast were placed before the diners. As fast as coffee was consumed, a waitress with flask replenished each cup. At the conclusion of the meal, the waitress made no attempt to present the breakfast check. One of the diners asked for it. The waitress said: "I don't know about giving you a check, even though you ate $6 worth. This dining room was engaged by the Wisconsin Bankers Association for its members." She consulted the floor manager who in turn made the same explanation. He suggested the R&E Council members follow him to the Chairman of the committee in charge of the breakfast. After introducing themselves to the chairman, one of the R&EC group explained they didn't want to barge in on a private party and could they pay for their breakfasts. The chairman assured the group the Wisconsin Bankers Association was pleased and proud to have R&EC members as its guests. He added: "I want to assure you gentlemen, however, we would collect if we felt there was any intention of chiseling." All of which proves that bankers can be gracious.

Wants to be Familiar with What Is

During the morning session of the Research and Engineering Council's business meeting at Milwaukee's Athletic Club on Thursday, June 22, J. Homer Winkler introduced A. V. Fitzgerald, 82 year-old printing veteran of Milwaukee. Mr. Fitzgerald is well known to many Printing House Craftsmen throughout the country. In a ringing voice, Fitzgerald explained that during his long career in the Graphic Arts he had always been familiar with *what was* in printing industry technology. Then he stated: "So long as I live, I wish to always be familiar with *what is* in the printing industry."

other objective is the creation of a code for safe handling of radio-active equipment and materials. A special sub-committee is looking into the development of a special press for printing by magnesium plates.

Engraving Standards

Arthur E. Brooks, Production Mgr. of Inland Press, Chicago, reported for Chairman Joseph Chanko, General Mgr. of Conde Nast Press, Greenwich, Conn. The Engraving Standards committee has held several meetings since last December. Final proofs on engraving standards for wet printing have been supplied. Mr. Brooks remarked that the manual as now collated is of interest to larger publishers. It is the intention of the committee to expand specifications for work in the commercial field. Additional information will be published at a later date for smaller commercial printers for one-color work. Assistance of Frank Schreiber, Commissioner, and Louis Flader of the APEA has been enlisted in preparing the additional material.

Materials Handling Committee

Elliott Donnelley, Chairman of the Materials Handling Committee related that a spring meeting was held in Washington, D. C., with 58 Graphic Arts executives present. His report was one of accomplishment inasmuch as the committee has secured the cooperation of the American Association of Railroads with respect to proper shipping of paper. The committee has been giving attention to concealed damage to paper in shipment and kinds of wrappers used around paper rolls. He stated the committee's inspection report is ready and the report on skid specifications has been completed. He also reported that the Traffic Committee had secured a reduction in the shipping rate on iron cores.

U. S. Government Printing Office

In reporting for Messrs. Lecraw and Kantrowitz of the U. S. Government Printing Office, Clarence L. Buck stated that among other objectives work is proceeding on binding adhesives, caseing-in paste and electrolytic tinning of electrotype copper shells. Work on solvents for cleaning type continues.

Research at RIT

Ralph Tufts reported for the Rochester Institute of Technology. He mentioned a laboratory project in the way of a plastic halftone printing plate that is being worked upon. Work is being done on an inexpensive plate beveler. A new web-fed offset press will be installed in the printing laboratory with complete plate-making equipment. The press will print four colors on each side of a 35 in. web.

Chroma-Graph Process

for making color separations now in use in lithographic and gravure plants — Color saturation achieved in all colors directly in the separation

By JOSEPH BRAUER*

**Brauer & Son, Inc., Milwaukee, Wis. Abstracted from paper presented before Research and Engineering Council of the Graphic Arts, Milwaukee, June 1950.*

RECENTLY we were approached by a gentleman with a scientific background who had found a method of making color separations. This method consisted of using high contrast plates coupled with a long tone scale, developed in an unusual dye-alkali developer. We purchased all rights to this process which is now known by the name Chroma-Graph. What we have done is to approach the matter from the production standpoint. In this manner we hope to develop it for the mutual benefit of the Graphic Arts.

We wanted to eliminate the conventional idea that we must use the three color theory in making separations. After all, we do not print carbros or dye transfers—we print lithography, gravure and letterpress with dots and inks—not dyes. We must attempt to live with the halftone screen and with printing inks such as presently exist.

We radically altered the characteristics of the panchromatic plate by changing to a great degree its sensitizing dyes and their spectral responses. Our new plate is developed in a special dye coupler. This development, when completed, resembles the usual appearance of a normal type silver image. We place a dual image in the emulsion. If we plot the one image, it carries almost straight and is our high resolution curve. The other image is almost flat and is our tone curve. The actual graph of the plate lies directly between the two and presents the usually impossible to achieve situation in straight line reproduction.

Our proudest accomplishment appears to be that we have achieved color saturation in all of our colors directly in our separation. This is done without resorting to tricky colors or fancy dyes.

Our developer is a simple two-solution affair, easily mixed and simply measured, which has no distinctive color and is controlled solely by time and temperature. The plate possesses the usual characteristic color and appearance of a conventional separation, which make the job of color separation easy.

Use of Densitometer

A densitometer can be used with no difficulty. No filters are needed to measure the plate, nor are there any changes of color in the plates.

The plate, however, has one strange characteristic which is interesting to note. Our density scale is from about 0.25 to 1.95. With this great density, the white light of the carbon arcs penetrates rapidly and causes the plate to look almost transparent.

In many instances, because of the peculiar condition, no opaque is required to achieve perfect drop out of white paper. This, of course, is dependent on the type of copy or delicate toning used and also upon the amount of white used to tone down certain vignetted tints. We would estimate that we do not use opaque or highlight masks on at least 50% of the total number of sketches produced.

Another phenomena encountered and caused by the high resolution curve is

that double-printing is seldom required. This means that packages, type, logos and lettering can be left in the original copy and reproduced faithfully without any added operation.

Color Saturation

Now let's talk about color saturation. Usually a color separation shows more color in the black area than appears in the actual solid color itself. Our plant uses masking in many instances, but we find flattening and distortion and over-correction in many instances. Our Chroma-Graph color separation faithfully and accurately records not only the usual color scale, but records solid color so that we start our scale where it should start—with a solid color.

If we start our scale from this base of the solid color, obviously we are running the printable scale with a great deal more fidelity than is usually found. The normal separation will allow only about an 80% tone in the solid areas, this feature makes the remainder of the tones out of printing balance. There is where a lot of good retouching time is wasted in pure tonal correction.

Before we briefly review pure and simple color correction let's see where the before-mentioned effects help costs. Most authorities on the halftone screen and this includes Deville, Fruwirth and Mertle, contend that the range of the glass screen is limited from about 85% to 10% tints. Beyond these limits we have distortion and poor printing.

Our idea of a color separation gives again, in actual production, drop-outs and solids where required without usual distortion of the middletones. We can safely expect to eliminate a major portion of tonal correction plus a considerable saving in reproducing type that falls within a process area. We can also safely eliminate in many jobs any use of outside highlight masks to drop out backgrounds and white margins.

Now we will discuss color. The strongest color in printing is the red. It is difficult for the average printer to realize that greens are a great trouble source. We do not need greens in reds, except to produce deep greens or dirty greens. Even if red is required, it is never needed in the quantity photographed in the conventional red separation. Without resort to a mask, or any means of correction, mechanical or otherwise, our red plate presents green areas 75% correct. Further, our yellows are correct in purples and lavenders and cold areas by about the same percentage.

Correcting With Booster Plate

Actual correction found in the plates is thus on a consistently high plane. We further correct our separations by use of a booster plate. In some ways this could be called a mask. But here again we encounter a strange phenomena which makes Chroma-Graph unique in color separations. On our mask, we use a high contrast orthochromatic emulsion developed in our same special dye-coupler solution. Our plate, therefore, presents a light resisting condition, while retaining light penetrating properties. It is transparent while being opaque. Again let me repeat that it looks like a conventional silver image and is easy to measure with a standard densitometer. The function of the booster mask is unique. Evidently, it acts to hold back shadows and blacks, while allowing our color saturation to continue. Above all, our plate has no apparent effect on middletones or highlights. We must refer to that dual image reminding ourselves that it is strong yet weak, light resistant, yet a perfect example of transparency.

No Special Technique

No special technique is needed and any good color separation photographer can learn the process in a matter of hours. The most difficult part of the process is in the making of the screened positives. However, with patience and persistence, the halftone photographer can learn to photograph the plate that has so much tone and density.

BOOKS
RECEIVED

Milwaukee Journal ROP Color

A LONG needed book upon the subject of newspaper r.o.p. color printing has been published. It is entitled *Production of ROP Color in The Milwaukee Journal*. The *Journal* has been pioneering in color along with a number of other papers for some years. Its accomplishments and progress in color printing have attracted nation-wide attention. Many printing executives (both business and mechanical) have visited the *Journal* plant to learn how color is handled in that plant.

In the foreword it is stated: "The problems of producing run-of-paper color in the *Journal* are essentially the same as those that arise and are met in other papers in much the same way. We discuss our problems not as one sorely beset, but to point out how they have been and are being solved. Our way of doing things is just one way that works; it is to the advantage of the entire newspaper industry that other ideas and viewpoints be explored . . . To our contemporaries, large and small, with much or little 'color equipment' here are our experiences: What worked and what didn't and why—to the best of our knowledge."

Even though it is an unreadable example of color printing, one page of the book is devoted to a miniature reproduction in black, red and blue to establish the first use of color in the *Journal* on Monday, January 5, 1891. It is amazing to this writer when he compares this color page with *all* of the recent color page examples reproduced from the *Journal* in the book.

There is a lavish use of miniature color reproductions in the book—in fact 71 pages contain one or more colors.

The comprehensiveness of the book is evident when the chapter headings are mentioned, as follows: Introduction—The World Grows More Colorful; Chapter 1, History; 2, What is Color? 3, Why Use Color? 4, Trial and Error; 5, The Color Process; 6, Some New Techniques.

It appears that newspaper color plates have been reproduced by all of the known methods and some techniques which are peculiar to the *Journal*. These are discussed in the book. Also, included in this category is the method for adapting magazine color plates for newspaper reproduction and an earthy discussion of the use of Bourges Colotone sheets.

Sections devoted to specific subjects related to color are as follows: List of newspapers which provide r.o.p. color; Leading newspapers in r.o.p. color lineage; R.o.p. color printed in the Milwaukee *Journal*, Nov. 1949; Copy and requirements for r.o.p. color; Glossary; Bibliography.

One of the most interesting pages is that showing seven units in color diagram form of a newspaper press hooked up for red, yellow, blue and black. The units are used for color with reversed cylinders. Measurements are also indicated for compensator adjustments which permit a color run with practically no waste or spoilage.

This is a grand and inspiring book and should be in the possession of all newspaper business, production and mechanical executives participating in color work.

Production of ROP Color in the Milwaukee Journal—Size 8¾ in. by 11 in., 190 pages, many color illustrations; bound in maroon cloth with jacket; cover stamped in black, gray and white press design with title. Printed by offset. Price $2.50 per copy. Order direct from The Milwaukee *Journal*, Milwaukee, Wis.

Vulcan Changes Name

The corporate name of Vulcan Proofing Co. has been changed to Vulcan Rubber Products, Inc. Company address remains the same at 58th St. and First Ave., Brooklyn 20, N. Y. The change was made in order to bring name of the company into closer accord with the products manufactured. No change has been made in company personnel. Vulcan manufactures offset and newspaper press blankets and offset and letterpress rubber and synthetic press rollers for the printing industry.

Opens Showrooms

Showrooms for the Hambro Machinery Div., Hambro Trading Co. of America, Inc., have been opened at 27-33 W. 20th St., New York, N. Y., according to an announcement by David Higgins, Sales Manager. Telephone number is BRyant 9-5173.

This is a view of the parking facilities available at the International Amphitheatre, Chicago, where the Sixth Educational Graphic Arts Exposition will be held September 11-23. Shown in the picture is part of the 15 A. owned and operated by the management of the Amphitheatre which will accommodate 4000 cars with attendants in charge. At night the whole area is brilliantly illuminated. Price for parking? IT'S FREE!

Graphic Arts Exposition

What it is
Machinery in action
Admission tickets
How to get there from hotels
Parking facilities
Comment of leading executives

By A. G. FEGERT*

**Director of Publicity, National Graphic Arts Expositions, Inc.*

THE man who sat next to me at an industrial luncheon meeting manifested interest in the Sixth Educational Graphic Arts Exposition to be held at the International Amphitheatre, Chicago, September 11 through 23, next. I told him in general terms that most of the exhibits were to be alive and in action and that it would be the greatest show ever produced by and for the Graphic Arts. He listened to my recital of plans and then remarked that he had received a letter the previous week from a paper manufacturer in England who said that he planned to visit the "Printers' Trade Fair."

My reply was that the Exposition management has been receiving letters from numerous places overseas, indicating a world-wide interest in the show.

This is the biggest project ever attempted by and for the Graphic Arts. Russell H. Herrell, of the management staff (Assistant to the President A. E. Giegengack) urged that some kind of superlative term should be applied to the big show—something that would be distinctive. After much cogitation, we suggested this: The World's Greatest Temporary Printing Plant. The appellation was approved and we thereupon made it the subtitle on a 12 page booklet, copies of which we have been distributing to the trade everywhere with the cooperation of Graphic Arts organizations planning to hold their respective annual meetings in Chicago during the two weeks' operation of the exposition. The 190 firms which have leased space for their varied exhibitions have also responded to the urging that they send copies of the booklet to customers and prospects. They have responded with such enthusiasm that reprints in large quantities have become necessary.

It is gratifying to the Exposition management that interest and enthusiasm among production and mechanical executives is mounting within all branches of the Graphic Arts.

Talk to Inventors and Engineers

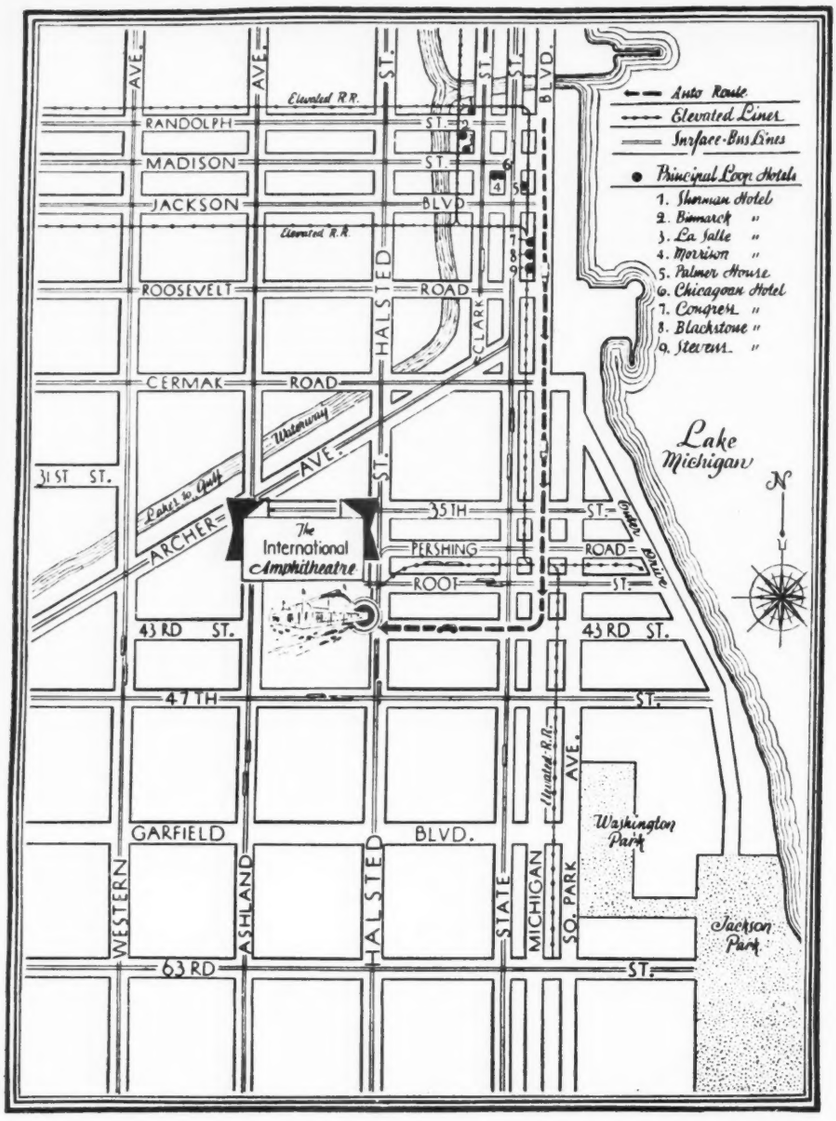
One of the valuable features of the Exposition is that printing executives will have an opportunity of meeting and talking to inventors, developers and engineers of the companies exhibiting equipment, supplies and processes. For the readership of *Printing Equipment Engineers* this will be a real peg upon which to build a fundamental reason for attending the Exposition.

Tickets for Expo

It is planned that admittance to the Exposition will be by ticket. Guest admittance tickets to the number of 500 thousand will be distributed through approx. 200 exhibitors. The tickets were made available the first part of July. They are obtainable through Graphic Arts cooperating groups, exhibitors and from the Exposition management at Room 802, 105 West Monroe St., Chicago 3. No doubt tickets will also be made available gratis to those executives attending the PIA, Craftsmen, ITCA and other associations holding their annual meetings concurrently with the Exposition. Definitely, it has been announced that the Exposition will be a Trade Show by and for the Graphic Arts—and the public is *not* invited.

Brackett and Oakes Comment

James R. Brackett, Washington, D. C., General Manager of Printing Industry of America, Inc., recently announced that the PIA Board of Directors had decided upon "The Technology of the Industry" as the general theme of PIA's convention in Chicago, Palmer House, Sept. 17-20 inclusive. Mr. Brackett also reported: "We want to develop a program which will be specifically related to the items shown at the Exposition. The personnel in charge of the PIA Convention forenoon clinics will consist of individuals who have had an opportunity of studying the Exposition displays and the panels



Here is a sectional map which will give printing executives an idea of the localized area in which they will be interested at the time they attend the Graphic Arts Exposition, Chicago, September 11 through 23. At upper right in the diagram are indicated most of the hotels at which Graphic Arts conventions will be held concurrently with the Exposition.

Since those attending the conventions and the Exposition no doubt will use different transportation facilities, these facilities are identified on the map as follows: Auto routes by heavy black line; elevated railroad by the knobby line; surface bus lines by parallel light lines.

The easiest and most direct route is via Michigan Blvd.

The International Amphitheatre extends north and south from Root to 47th St. and east and west from Halstead to Ashland Sts. Main entrance is on Halstead St.

will report on actual machines and devices which are on exhibition."

Gradie Oakes, General Chairman of the convention for the Intl. Assoc. of Printing House Craftsmen convention, Hotel Stevens, Sept. 10-13 inclusive, stated in the official program all of the convention opening day has been allotted for Craftsmen to visit the Exposition, as well as parts of Tuesday and Wednesday. The educational program is under the direction of Edward H. Christensen, Treasurer of NGAE, Inc., and also typographic consultant to Central Typesetting and Electrotyping Co., Chicago.

The Intl. Typographic Composition Assoc., through the planning of three of its officers, are arranging time out from the convention for members to attend the Exposition on Sept. 14-16 inclusive. The convention will be held at Hotel Sheraton. Those arranging the program include President Frederick H. Lutz, Vice President O. B. Powell and Executive Director Frank M. Sherman. Lester A. Neumann, Chicago, is chairman of the exhibits committee representing the ITCA and the Chicago Typographers Assoc. of which Harold Dantuma is President.

A number of other national Graphic Arts groups are planning their annual meetings concurrent with the Exposition. These include the Lithographers National Assoc., Label Manufacturers, Book Manufacturing Institute. National Printing Equipment Assoc. and the Intl. Printing Supplymen's Guild.

Writing to the constituency of the National Graphic Arts Education Assoc., Fred J. Hartman, Washington, D. C., Education Director, in a recent bulletin said: "As previously announced, the program of our Silver Anniversary Conference will be built largely around the unusual educational opportunities afforded by the Exposition."

Another expression of the value of the forthcoming Exposition was made by Alfred Scott, Graphic Arts Div., Fairchild Camera and Instrument Corp., who said: "The thousands of people who have entered the Graphic Arts field during the past 11 years (since the last previous Exposition) will have for the first time an opportunity to see their chosen field in its entirety, and obtain a wealth of knowledge. This period of time has seen an incomparable evolution in machines, equipment and methods."

One of the numerous appellations given to the September Exposition is "The Magnificent Mile of Machines and Methods." The basis of this name, or nickname, is that there will be a mile of frontage of exhibit spaces facing the aisles, along which the tens of thousands of Graphic Arts executives will travel to see the Exposition. This show will be almost twice the size of the last previous one held 11 years ago (1939) in New York. It will be three times the size of the First Educational Graphic Arts Exposition held in the Coliseum in Chicago in 1921. In passing, it is appropriate to mention that the 1921 Chicago Exposition was the first of the non-profit shows produced by and for the Graphic Arts. It was conceived, promoted and managed by the Chicago Club of Printing House Craftsmen, one of whose past-presidents, Charles W. Gainer, is head of a group being organized to be known as "The Graphic Arts Veterans of '21." The members to constitute this group are men who were in attendance at the 1921 Show, and present representatives of firms which exhibited their products or services at that show. It is planned tentatively, to hold some kind of get-together during the 1950 Chicago Show.

Exhibitors' Plans

Innumerable questions are being asked about plans of exhibitors. The exposition management cannot answer these questions with precision. Only in a general way have the renters of exhibit spaces indicated what they plan to put on display. Currently, much activity is in evidence as engineers representing exhibitors are consulting technical experts in charge of the International Amphi-

Exposition Hours

The National Graphic Arts Exposition will be open daily from Monday, September 11 to 23 inclusive except Sunday, September 10 and 17.

Exposition hours will be from 1 p.m. to 10 p.m. daily without intermission.

theatre about special problems. These experts know all the answers.

It is reassuring to talk to these men who have the know-how of planning exhibits. While some of the exhibitors are new in planning for exhibits in action, the men whose routine it is to operate the huge exposition building are capable and willing to advise with the exhibitors.

One of the incidental problems is to determine how much electrical power will be required. Huge printing presses, typesetting machines, photographic equipment, platemaking machines, bindery equipment of all kinds—innumerable items covering the 3 A. of floor space—all on the ground level, will require tremendous electrical power. In an interview, R. J. Benson, Electrical Engineer in charge of operations for the company owning and managing the huge exposition hall, indicated all he wants to know is how much electricity will be required. All basic wiring will be done long before the arrival of the machines to be put into action during the exposition.

Provision for the exhibitors to indicate their needs has been made in forms to be filled out which are part of the Exhibitors Manual, copies of which have been sent some weeks ago to the exhibitors. Exhibitors will also use water, steam, compressed air, and gas for their various exhibits in action, and all of these things are to be supplied when, where and as needed, so Mr. Benson told the interviewer.

No machines can be too large for proper handling at the International Amphitheatre, so the interviewer was told. Twentx-ton trucks can be driven to any part of the building with their heavy loads and the machines will be placed right where they are to be erected for action during the show.

Two weeks will be allowed for the exhibitors to install their machines and other exhibits; they will be in action as exhibits for the two weeks of the show (Sept. 11-23) and then one week will be allowed for the exhibitors to remove their property. Such is the plan. Provision was made for these contingencies by National Graphic Arts Expositions, Inc., when the International Amphitheatre was leased for the five week period.

The picture of these men was taken outside the White House in Washington, D. C. at the time the then President Harding (a publisher-printer) opened the Chicago Graphic Exposition in 1921 by means of an electric signal from his desk in the White House. The Sixth Educational Graphic Arts Exposition to be held in International Amphitheatre September 11-23, will be three times larger than the 1921 show. In the picture, at right is the Hon. John J. Deviny, now U. S. public printer who will be one of the speakers at the proposed dinner of the "Veterans of '21" at the time of the forthcoming Chicago Exposition. Charles W. Gainer, a Past President of the Chicago Craftsmen's Club, and for five terms Treasurer of the Intl. Assoc. of Printing House Craftsmen, is President of the "Veterans of '21."

HOW TO GET THERE

THE International Amphitheatre at which the Sixth Educational Graphic Arts Exposition will be held September 11-23, is located at 43rd and Halsted Sts., Chicago, a distance of 5 mi. from downtown hotels. Subway and elevated cars and surface lines run at 4 to 6 min. intervals and from 20 to 40 minutes are required to make the trip from the hotels to the Amphitheatre.

Halsted street-cars traveling south from the downtown area on Clark St., will take visitors direct to the door of the Amphitheatre. Fare is 15c. State St. surface lines issue transfers for westward trip at 43rd St.

Subway trains with stations on State St. (just outside Palmer House where the PIA convention will be held) will take Exposition visitors to Indiana Ave. station at which they will transfer to Union Stock Yards shuttle train to Halsted St. station, which is one block north of the International Amphitheatre. Fare on the subway-elevated system is 17c.

During the Exposition, special buses will probably be available for transportation purposes direct from printing convention hotels to the International Amphitheatre.

Convention committees will give specific instructions. Charts will be made available for exposition visitors at leading hotels.

Motor Car Instructions

Persons using their autos from the downtown area will travel south in Michigan Blvd. to 43rd St., then west to Halsted St., and turn into the 15 A. parking space (free parking) provided by the management of the International Amphitheatre.

Visitors traveling from eastern points will probably use U. S. Route 20, or Route 12.

From the Outer Drive, going north, auto drivers will turn westward at 55th, 47th or 43rd Sts., and proceed to 43rd and Halsted Sts. direct to the International Amphitheatre.

Halsted St. is 800, West, according to Chicago's street numbering system, and 43rd St. is 4300, South.

Research Bibliography

A bibliography of books and articles on *Management of Industrial Research* has been issued by Arthur D. Little, Inc. The bibliography was prepared primarily for use by members of the Little staff as a supplement to their personal experience in the management of research programs and projects. The Little organization believes the bibliography will serve other organizations in a fundamental review of their own research policies, objectives, procedures and programs. Copies may be obtained free of charge by writing Arthur D. Little, Inc., Memorial Dr. at Kendall Sq., Cambridge 42, Mass.

Centennial Celebration

The Oskaloosa (Ia.) *Daily Herald* celebrated its 100th year of operation on July 2 by issuing a 100 page Centennial Edition. The celebration opened on June 27 with Washington columnist Drew Pearson as guest speaker. Ceremonies also included an open house for local businessmen and an entertainment visiting publishers. Editor and publisher of the *Herald* are Phil Hoffmann and C. S. Walling, who have been associated together for the past 65 years—first as employees, later as employers and owners. The *Herald* is a member of the American Newspaper Publishers Assoc., Inland Daily Press Assoc., National Editorial Assoc., Iowa Daily Press Assoc. and Iowa Press Assoc.

ANPA Mechanical Conference

Well balanced program — 1020 registration — Industrial relations, research and modern equipment stressed at Buffalo —New equipment exhibited.

THE 1950 ANPA Mechanical Conference held at Hotel Statler, Buffalo, N. Y., Monday to Wednesday, June 12, 13 and 14, was attended by approx. 1020 production and mechanical executives, managers, and equipment and supplier representatives. The only complaint registered at this year's conference was with respect to separation of the conference meeting room and the exhibit hall. The conference meeting room was located on the first floor of the hotel while the exhibits were held on the seventeenth floor. Obviously, this situation couldn't very well be avoided. It is anticipated that at next year's meeting at the Edgewater Beach Hotel, Chicago, the exhibits and the conference room will be in near proximity.

Exhibits Unusually Interesting

At the conference, approx. 49 equipment and supplies manufacturers occupied 86 booths. The exhibits were unusually interesting because of first-time showing of newly developed equipment. Among them were Dick Mailer's prototype model of an improved hand mailer; Collmar Corporation's Cooksey System of web press control; Monomelt's plate shaver; Rouse's band saw for cutting apart and sizing flush-mounted photoengravings; National Bundle Tyer's bundle tying machine; Wood Newspaper Machinery's Intrasertor; Alico's method of adapting press rollers to anti-friction bearings; Sta-Hi's curved stereotype color mat registering machine; Beard's chases; Link Paper's Teletypesetter tape; Capital Tool's butt rewinder.

The Monday Morning Opening Session

John W. Park, Production Mgr., Chicago *Tribune*, opened the conference on Monday morning, June 12. He introduced Edward H. Butler, Publisher of the Buffalo (N. Y.) *News*, who in turn welcomed executives to Buffalo. Mr. Park then "introduced" Edwin H. Evers, who this year will have completed three years as chairman of the ANPA Mechanical Committee. Evers spoke appreciatively of the cooperation extended by committee members and the newspaper printing industry generally.

Interdepartmental Cooperation

When invited to discuss *Interdepartmental Cooperation*, President James M. Cox jr., of the Dayton (O.) *Journal-Herald* and *News*, stated: "I was rather amused at this because, like oxygen, it is essential to life. If you don't have it, you simply don't function."

Speaking upon a hitherto taboo subject, Mr. Cox discussed labor relations frankly. Personal interest in employees, even though the organization has grown to large proportions, should be a prime objective of top management. Said he: "This is not only the decent thing to do, but we believe it makes our people feel that they are human beings after all and should be treated as such."

He discussed recent newspaper mergers. He asserted: "We have come to the crossroads in the publishing industry, facing two rather vital issues: (1) We can't continue to raise advertising rates, (2) Nor can we price ourselves out of the mass market by increasing circulation rates."

Mr. Cox quoted from an article appearing in the April 1 trimonthly report published by PIA, Inc. The heading of the article was: *ITU Considers Increased Productivity*. One of the direct quotations as is follows: "In an article appearing in the January issue of the *Typographical Journal*, Mr. Taylor states: 'It is high time all members gave some thought to this matter. If we do the kind of job our organization and our members are fully capable of doing there will be little incentive for employers to seek revolutionary changes.' "

Near the conclusion of his address, Mr. Cox said in unmistakable language: "I feel that all too often many busy purlishers have been entrusting (union) negotiations to their executives. This creates a rather distant relationship between the top command and organized employees. I found it good business to sit in and conduct these discussions personally. You get to know the type of people with whom you are dealing and get a better slant on their problems by talking to them face to face."

Foremen Attitudes

Next to be introduced was L. C. Morrow, Editor of *Factory Management and Maintenance*. His subject was *Foremen Attitudes*. One of the most important passages from Mr. Morrow's address is as follows: "Every foreman should expect from every employee reporting to him a full measure of work. But with equal intensity he must believe that the employee who is expected to deliver a full measure of work must be provided with the right equipment and the right methods. And he must be just as deeply convinced that the employee is not a mechanism, but is a person with his fair share of the attributes and failings of the human being."

Tomorrow's Key Men

Selection and Training of Tomorrow's Key Men was the first topic at Monday afternoon's session and was presented by W. E. Gibbons, Production Mgr. of the Chicago *Herald-American*. Stating that the selection and training of tomorrow's key men is the responsibility of the key men of today, he asserted that the latter must instill in those who are to follow, a feeling of responsibility in and belonging to the particular organization.

In a shop or industry where there are many employees, he continued, there are sure to be some outstanding people who have the qualifications to become leaders.

In an organization where working conditions are comfortable and the management attempts to keep the employees contented, the foremen have the opportunity to concentrate and train the key men of tomorrow.

Normal grievances should be much easier to cope with, especially in an organization where grievances and misunderstandings are brought out by open discussions and where a sincere effort is made to consider the other fellow's point-of-view.

Any business is in danger if it has not given thought to where its future managers are coming from, and any young man is in a rut if he hasn't given thought to where he is going in his company, he concluded. (*Continued on Page 34*)

ANPA Research Group — All of these men are associated with ANPA Research at the Easton (Pa.) Laboratory with the exception of ANPA Research Director C. M. Flint whose office is in New York, N. Y. Left to right, they are: Roy Prince in charge of Easton Laboratory; Brian O'Brien, jr.; Mr. Flint; Frank J. Stanczak, and Leonard L. Johnson.

Research and Stereotype Session

C. M. FLINT, ANPA Research Director, during the Wednesday afternoon session of the ANPA Mechanical Conference in Buffalo, June 14, presented a paper on the accomplishments of the Research Dept.[6] He showed slides of some instruments and reported on developments and equipment sponsored by the laboratory. He also exhibited views taken in the ANPA Research Laboratory in Easton, Pa.

During the course of his discussion, Mr. Flint assured his listeners that research does not eliminate jobs. He decried information published in newspapers and trade journals regarding new and revolutionary processes. The tenor of his talk, as on previous occasions was that development of new processes and methods is evolutionary. He assured executives attending the conference that "In spite of all of the new processes and methods, the stereotyping process will be with newspapers for a long, long time."

A query by S. D. Willey, New York *News* Production Mgr., from the floor with respect to a change in policy was: "What has changed the research program from a year ago?" The questioner said he referred to a statement made by Mr. Flint at the 1949 Chicago conference to the effect that stereotyping was on the way out. In reply, Mr. Flint said he didn't make such a statement. He also stated the ANPA is not attempting to eliminate stereotyping from newspaper work.

In his address, Mr. Flint pointed out that the Research Dept. had developed a new type of plastic molding material, the purpose of which is to enable the stereotype department to make better plates. He also discussed an entirely new method of molding mats which gives the stereotyper control over his product and provides far greater fidelity of production.

Flint also discussed a method for printing from original plates by offset, dry offset and direct plate printing as in normal letterpress. This development, he explained, is planned for small newspapers. At the moment all three processes require photo-composition.

For the small newspaper, the Research Director stated that direct plate printing requires etching line work to a depth of 0.008 in. to 0.010 in., utilizing existing equipment. The process, however, is dependent upon the success of ANPA Research Dept.'s high speed engraving program.

Some critical discussion occurred from the floor about the new ANPA plastic molding blanket. Charles G. Bowen, Stereotype Supt. of the Philadelphia *Inquirer*, asked about developments with the use of the plastic blanket in direct pressure molding. Flint replied by saying that studies had not been completed in direct pressure molding. One executive asserted that announcement of the plastic molding blanket was premature. It appeared that a number of executives speaking from the floor were eager to try the molding material in their plants but could not obtain trial blankets. Mr. Flint took full responsibility for stopping distribution because it is unwise to get too many plastic blankets out in the field for experimental purposes. He explained he would rather actual use information reach the user through practical stereotypers than to come from the Research Dept.

Joseph D. Goggin of Newspaper Publishers Supply, apparently has been selected to sponsor distribution of the blanket when all use data has been assembled. He said the plastic blanket will be distributed to all regular sources of stereotype supply. He said: "It is almost a case of fitting the blanket to individual equipment because of the differences in equipment in many plants." Stereotypers were advised to keep in touch with their mat manufacturers.

Previously, Mr. Flint stated that the New York *Journal American* was ready to use the plastic molding material on a regular production basis but only by the rolling method. This paper has secured full 1 in. shrinkage on the printed page with less mat moisture content with better results, as against ¾ in. shrinkage when using a mat of higher moisture content. Flint reported experimental work with the blanket is being conducted at the Chicago *Herald-American* and the Washington (D. C.) *Times-Herald*.

Ed Reilly of Reilly Electrotype Co., discussed *Plastic Plates in the Newspaper Plant*, in relation to their qualities and advantages. He announced that within the next few months platemakers will be able to shave plastic plates within a tolerance of 0.001 in. thickness.

Charles G. Bowen of the Philadelphia *Inquirer* asked Mr. Reilly if the shrinkage on four-color process plastic plates would be uniform when molding by direct pressure hot molding as compared to cold molding. Mr. Reilly stated they should be molded cold because the shrinkage would be different.

In response to a question asked by Reg Tranter, Mechanical Supt. of the Boston *Herald-Traveler*, about making corrections in plastic plates after they have been proofed, Mr. Reilly stated that only visual inspection is possible. All correction work must be done in the pattern. As many as 100 plates can be molded from a matrix; if picking should develop the mold is discarded.

During the concluding part of the Wednesday afternoon session, Charles McGuire, Mechanical Supt. of the Minneapolis *Star* and *Tribune*, discussed the stereotyping process generally. He stressed good machinery maintenance, particularly on the plate shaver. "The bottleneck in all stereotype departments," he said, "is the mat packing." He said the ANPA Research Dept. is on the right track in its work on mat packing. He also asserted we will never achieve a final printed paper that cannot be distinguished from the original proof until the mat manufacturers give us a mat with the ultimate in stayback qualities.

[6] A listing of the ANPA Research accomplishments appears in brief form in the May issue of *Printing Equipment Engineer*.

To Find the Right Man

The 10,000 mechanical and production executive readers of *Printing Equipment Engineer* are vitally interested in improving production methods. They prove that by reading *Printing Equipment Engineer*. Your Help Wanted Ad in the *Printing Equipment Engineer* Classified Section will bring response from highly qualified men. Rates on page 67.

(*Continued from Page 32*)

Suggestion Systems

A suggestion plan can't serve as a means for improving industrial relations unless employees participate in the plan, stated L. G. Mills who followed as next speaker on the program. Mr. Mills, President of Suggestion System Associates, spoke on *Suggestion Systems*.

The mere announcement that one has put up some suggestion boxes and will pay for adoptable ideas, will seldom attract more than a trickle of unimportant suggestions, gripes and "wise cracks." Such an effort frequently leaves an unfortunate aftermath of misunderstanding and ill feeling among the employees.

Payment of awards for the ideas that are found practical for adoption is an essential in establishing and maintaining confidence and incentive among the employees.

Department heads should be convinced that every improved method, working condition, economy and efficiency reflects credit upon their individual depatrments.

One of the most important means of achieving improved industrial relations, Mr. Mills added, is the priceless privilege of employee-initiated contacts with management executives, which the suggestion plan makes possible. If an employee is to receive an award for his adopted idea, let the president or other ranking executive, invite him to his office and present the award to him along with sincere expression of appreciation.

Foreman Training

The role of the foreman as a manager, personnel director, leader and executive working in cooperation with other mechanical executives was discussed by E. E. Sando, Vice President of the National Foremen's Institute, in an address entitled *Foreman Training*. Sando impressed mechanical and production executives of the importance of having an organization to consult for research data and answers to decisions affecting the organization.

It is necessary, he added, that foremen understand people. Good executives have a genuine liking for people. It is a most essential part of the requirements for good management.

With today's unsettled conditions, it is important to eliminate the irritations that aggravate workers. A foreman has the problem of safeguarding his workers. Workers do not check their problems at the time clock.

Today's enlightened foreman's training takes into consideration not only an understanding of the workers home problem, but the know-how to help solve some of workers' personal problems.

Mr. Sando stated that foreman training experience has taught there is no substitute for close relations between employer and employee.

A foreman's ability to get along with other foremen is equalled only by his ability to get along with the man to whom he reports.

Foremen not only plan the use of the working force, but must constantly check supplies of material, see that obstacles to good performance are removed, and anticipate difficulties that may arise.

Management is increasingly concerned with the human relations aspect of production. Management has come to realize, he added, that authority and rights are of relatively small importance. Of much greater value are such things as competence, knowledge, insight, initiative and leadership. The foreman who has the respect and good will of people working for and with him, has also the authority he needs. Contrary to this, the foreman who lacks his employees' respect and good will, is stymied regardless of how much authority tradition has granted him.

The speaker continued, it does not matter how good our company policies are, if they are not understood by the foreman, he cannot explain and interpret them properly to the workers.

Auditing-Mechanical Cooperation

A paper by R. P. Hunter, Asst. Secretary-Treasurer of the Birmingham (Ala.) *News and Age-Herald* entitled *Cooperative Efforts of the Auditing and Mechanical Departments*, was read by Shields Johnson, General Manager of the Roanoke (Va.) *Times-World News*. Emphasizing the need for cooperation between the auditing and mechanical departments, Mr. Hunter stated. "Management today is deeply concerned with the operating costs of mechanical departments. Were foremen asked to report what their cost of operation or production is, very few could supply the answer."

Some of the Newspaper Mechanical and Production Executives in Attendance at the ANPA Mechanical Conference held in Buffalo, N. Y., June 10, 11 and 12, 1950

1.—James Casselli, Pressroom Supt., *Long Island Daily Press*, Jamaica, N. Y. Sol Swartz, Mechanical Supt., Harrisburg (Pa.) *Patriot;* Nicholas J. Miranda, Mechanical Supt., *Long Island Daily Press*, Jamaica, N. Y. Fred Travelena, Chas. Eneu Johnson & Co. Alex Kramer, Pressroom Supt., Syracuse (N.Y.) *Post Standard*. Frank Parker, General Mgr., Staten Island (N.Y.) *Advance*. Bert Cox, Pressroom Supt., Newark (N.J.) *Star-Ledger*.

2.—Charles Frederickson, Production Mgr., Westchester County Publishers, White Plains, N. Y.; Russell B. Miller, Production Mgr., Bloomington (Ill.) *Pantagraph;* Edgar Mills, President, Eastern Newspaper Supply, Inc.; W. T. Slusher, Mechanical Chief, Roanoke (Va.) *Times* and *World-News*.

3.—Harry Porte, Director of Sales, Mergenthaler Linotype Co.; Earl Schaeffer, Production Manager, Zanesville (O.) Publishing Co.; Alfred B. Bedell, Sales Representative, Mergenthaler Linotype Co.

4.—Charles Kirk, Stereotype Supt., Detroit *News;* T. J. Ewing, Stereotype Supt., Montreal (Que.) *Star;* C. S. Reilly, Vice President, Goss Printing Press Co.; D. H. Parker, Production Mgr., and James Hunter, Pressroom Supt., both of Montreal (Que.) *Star*.

5.—Willis Hunter, Vice President, Matrix Contrast Corp.; William Street, Vice President, United American Metals Corp'n; Walter Cassidy, International Printing Ink Corp.

6.—William P. Mulvaney, Vice President, Rapid Electrotype Co., Cincinnati, Ohio; Edward Zimmerman, D'Arcy Advertising Agency, St. Louis, Missouri; George B. Eberts, D'Arcy Advertising Agency, St. Louis, Missouri.

7.—Ellsworth Bailey, Press-Stereo Supt., Alton (Ill.) *Evening Telegram;* Al C. Chagnot, Maintenance Supt., Youngstown (O.) *Vindicator;* Joseph Goggin, President, Newspaper Publishers Supply Co.; Howard Measmer, Stereotype Supt., Youngstown (O.) *Vindicator*.

8.—Herman Wedemeyer, Pressroom Supt., Detroit *Free Press;* Wesley Dammes, Ben Shulman; Tom Dolan, Thomas M. Dolan Co.; Harvey Brundage, Vice President, Cline Electric Mfg. Co.; Gordon F. Elrod, Vice President, Ben Shulman.

9.—C. A. Tallinger, Central District Rep., *Printing Equipment Engineer;* A. T. Mann, jr., Vice President, Intertype Corporation; Walter E. Wines, Engineer, Chas. T. Main, Inc.; Edward H. Owen, Asst. to Editor, *Printing Equipment Engineer*.

10.—Louis W. Woelfel, Mechanical Supt.; James H. Righter, Asst. Business Mgr.; and Edward H. Butler, Publisher, all of the Buffalo (N Y.) *Evening News*.

11.—S. K. Trunnell, Composing Room Supt., Washington (D.C.) *Evening Star;* F. Lester Yeager, Production Manager, Los Angeles *Times-Mirror;* L. J. Chase, Production Manager, St. Louis *Star-Times;* M. George Martin, Production Manager, Louisville (Ky.) *Courier-Journal* and *Times*.

12.—Pat Kearns, Roller Plate Metal Co.; LeRoy Tucker, Photoengraving Supt., Racine (Wis.) *Journal-Times;* Bert B. Mader, Photoengraving Supt., *Christian Science Monitor*, Boston.

13.—Joseph P. Dorr, President, Capital Tool Mfg. Co.; Howard Jampol, President, The Jampol Co., Inc.; Reg Tranter, Mechanical Supt., Boston *Herald-Traveler*.

14.—Frank Moor, Bldg. Supt.; Wm. C. Rollo, Pressroom Supt., and John Penry, Stereotype Supt., all of Newark (N.J.) *News*.

15.—Paul V. Driscoll, Production Mgr., Connellsville (Pa.) *Daily Courier;* Harold E. Eich, Pressroom Supt., *Tribune-Republican;* Meadville, Pa.; Ted Serrill, Manager, Pennsylvania Newspaper Publishers Assoc., Harrisburg, Pa.; S. L. Swartz, Mechanical Supt., Harrisburg (Pa.) *Patriot-News*.

16.—George Campbell, Engraving Dept., Moore Business Forms; Ralph Tufts, Research Director and J. W. Proctor, Research Div., both of Rochester Institute of Technology.

17.—Jack Kelt, Representative, Mallinckrodt Chemical Co.; Adam Schreiber, Stereotype Supt., and John Mosher, Pressroom Supt., Gannett Newspapers, Rochester; W. W. Spaulding, Photoengraving Supt., Albany (N.Y.) *Knickerbocker News*.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

ANPA Mechanical Committee — Members of the Mechanical Committee who assembled in Buffalo, N. Y. on June 12, 13 and 14 for the annual ANPA Mechanical Conference are pictured from left to right as follows: Leven T. Deputy, Mechanical Supt., Dallas (Tex.) *Morning News;* Lyle K. Anderson, Vice President, Minneapolis (Minn.) *Star* and *Tribune;* Leslie J. Griner, Production Manager, Detroit *News;* John W. Park, Production Manager, Chicago *Tribune;* Vernon R. Spitaleri, Manager, ANPA Mechanical Dept.; Edwin H. Evers, Production Manager, St. Louis *Globe-Democrat;* W. Watson Southam, Production Manager, The Southam Co., Ltd., Montreal, Can.; W. E. Gibbons, Mechanical Supt., Chicago *Herald-American;* B. F. Garrity, Production Manager, Gannett Newspapers; Harry T. Eybers, Production Manager, Salt Lake City (Utah) *Tribune-Telegram;* F. Richard Lilly, Engraving Dept. Supt., Miami (Fla.) *Herald;* Earl Weiskittel, Pressroom Supt., Youngstown (O.) *Vindicator;* Stephen J. Lambert, Production Manager, Brooklyn (N.Y.) *Eagle;* and John L. Blake, Scripps-Howard Newspapers, New York. Absent at the time were Shields Johnson, General Manager of the Roanoke (Va.) *Times* and *World-News*, and William F. Lucey, Business Manager of the Lawrence (Mass.) *Eagle* and *Tribune*.

The auditing department at the *News* maintains a detailed record of all equipment in the mechanical department, as well as the maintenance costs, and is interested in the analysis of all operating expense necessary to the production of the newspaper.

At weekly meetings held between the production manager, heads of the mechanical departments and members of the auditing department, a discussion is held to accomplish specific aims and emphasize the following points:

1. Orientation of the foremen to a new phase of managerial responsibilities and making them more conscious of their responsibilities costwise in operations.
2. Development of a better understanding of each others' interdepartmental problems.
3. Teaching of the facts behind company policies, so foremen are better prepared to answer problems arising in their departments.
4. To strive to be helpful in improving supervisory practices and to encourage suggestions from department personnel.

Where costly repairs are necessary or machine maintenance is a heavy item, the auditing department at the *News* has the information available on which a decision can be made as to replacement or overhauling of such equipment or whether a more modern piece of equipment will function more efficiently and improve production.

Newspaper Cost System

The Tuesday program opened with a session devoted to discussions of the composing room. *The Newspaper Cost System as a Tool for Profit and Cost Control* was the title of the talk delivered by Harold G. Rogers, of McKinsey & Company, New York management consultants. Newspapers, Mr. Rogers stated, are in business essentially for the same reason as other businesses—for profit.

Through the establishment of cost control, monthly expense reports are prepared for each of the mechanical departments. These reports enable the foreman to tell his superior what items under his control were over the budget, investigate the causes of variance, and plan future operations to avoid any excesses.

Through these reports, comparisons are made between what the expense should be and what it actually was at the end of the period. Most of the present reports compare the current month with the last month or the same month a year ago. The disadvantage of such a comparison is that one never knows whether the costs shown for the previous month or year reflects a time of extreme efficiency or inefficiency.

Through cost control, the pressroom foreman receives a report that shows the budgeted and actual costs of all major expense items. He may also get the original detailed report on the actual cost of newsprint and ink used, and the budget for those items.

Promoting close and friendly cooperation between the composing room and editorial departments in order to achieve economy of operation, was the next speaker, E. Z. Dimitman, Executive Editor of the Newark (N. J.) *Star-Ledger*. In Mr. Dimitman's talk entitled *Coordinating Composing Room and Editorial Departments*, he told the production and mechanical executives that costs of newspaper production will not start to slide downward in the foreseeable future.

The editor can make it possible, he stated, for the composing room foreman to keep his machines operating at a constant pace, rather than in "fits and starts" which is wasteful and costly.

All copy leaving the editorial department, he added, if not intended for the edition immediately ahead should be clearly marked when it will be needed.

An editor should work out with the composing room foreman a definite schedule of pages to be moved early in the day.

Dimitman outlined practices in composing rooms which are "irritating, offensive and dangerous" to the operation of a smoothly functioning newspaper. One is the machine operator who edits copy and questions facts without authority. The "foreman, straw boss or printer" who questions the manner in which a piece of copy is marked. The employee who insists that "it can't be done—we never did it that way before."

Coordinating Composing Room and Advertising Departments was the title of a paper delivered by D. B. Abert, Business Manager of the Milwaukee (Wis.) *Journal*. Mr. Abert emphasized that the methods he described apply only to the *Journal*, but could be followed by other newspapers.

In the effort to control costs, gain more efficiency and give better service to advertisers every part of the chain of processes must function well or costs spiral upwards. They take the form of excessive overtime, lost revenue, allowances because of errors, and general costly confusion in the production process.

In the day-to-day operation of the composing room, the most important single factor is controlling the flow of editorial and advertising copy, he stated. Flow of copy must provide for an even supply of work throughout the day or evening to fit the crew's schedules and avoid hourly peaks and valleys which mean either a whirlwind rush or standing time.

Some of the standards the *Journal* asks advertisers to observe include: clear, neat and complete copy; avoid tight composition and angled elements as much as possible; eliminate extensive mortising of cuts of casts and complicated borders requiring special fitting; copy and layout must carry distinct instructions; copy must be legibly typed on separate paper not exceeding 8½ in. by 11 in. in size;

complete information on engravings, mats, casts, etc.; all material be submitted with copy, if possible, or that the layouts show the illustrations in actual size to avoid resetting when the cuts come through; and corrections for full page ads be submitted in quarter page units.

The planning and dispatching office at the *Journal* is centrally located adjacent to the composing room and near the art, engraving and photo departments.

The dispatch office manager and his assistants are charged with the responsibility of keeping copy advanced to its farthest point at all times. The dispatch office takes the necessary steps to clear up many production problems that ordinarily would take composing room time or sales time to straighten out. The dispatcher is in a position to warn the advertising department about approaching bottlenecks.

All art work, cuts, mats and photographic orders are channeled through this office.

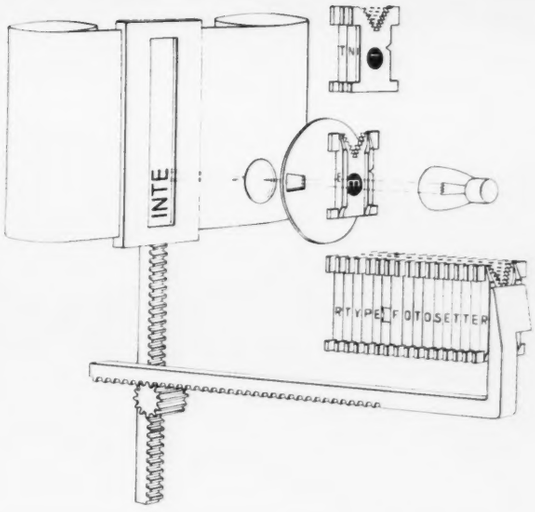


Fig. 1.—Diagrammatic representation of Intertype Fotosetter photographing mechanism. By way of explanation, the matrix line consisting of matrices bearing the words "Intertype Fotosetter" is moved from the assembling elevator position to the justifying position (shown in the diagram) by the delivery slide in much the same way that a line of matrices on the hot metal machine is delivered to the casting mechanism. The line is first justified to full predetermined line length. Then, commencing at the left end of the line, matrices are raised vertically one by one to a position between the lens-shutter and light source where they are aligned and exposed to film or paper at eight exposures per sec. After exposure, the matrices are assembled in line form; when each matrix in the line has been exposed, the second elevator lifts the line to the distributor where they are returned to the magazine in the conventional manner. The letter character in negative film form is embossed cross-wise in the body of the matrix. Each time a matrix is fed into the camera mechanism, the film carriage at right drops a distance commensurate with the set-width thickness of each matrix.

Photo-Typesetting

Four of the equipments developed for photographic type composition were discussed and slides were shown by Reg Tranter, Mechanical Supt. of the Boston *Herald-Traveler*, during Tuesday morning's session.

Mr. Tranter discussed the probable utility of phototypesetting equipment in the newspaper printing industry. He remarked that "speeches and syndicated columns must now be set within hours of edition time, paralleling late news . . . time copy on which high averages were made is almost a thing of the past . . . and the only solution is greater productivity."

"The designers of photographic type composing machines appear to have been thinking along these lines . . . At present the usefulness of these machines is dependent on the rapid production of engraved plates either for stereotyping or direct plate printing. Considerable progress has been reported by the ANPA Research Dept., and a 5 min. plate seems to be within range."

With the aid of the slides, Mr. Tranter's discussion of Intertype's Fotosetter was quite complete. While a number of these machines are in actual operation in plants, he confined his remarks about actual production use to the installation in the Government Printing Office which has been in operation since 1946.[1]

Lumitype Photo-Compositor

Tranter next discussed the Lumitype machine which is being developed at the Graphic Arts Research Foundation in Cambridge, Mass.[2] His explanation of the justification system is interesting, for example: "A 30 pica line in which six words have been set. There are 500 units in a 30 pica line; a normal space (between words) consists of six units. If some of the character widths plus the normal spaces in these eight words add up to 483 units, we have a remainder of 17 units, or 17 0.01 in. to be divided between the eight words. The electrical calculating system distributes this space so that in the first three word spaces there are nine units, and in the remaining four word spaces there are eight units. There is a difference of 0.01 in. in the spacing, which is an amount almost imperceptible to the human eye."

Mr. Tranter exhibited a slide of a later development by means of which 16 fonts of "matrices" may be carried in the body of one 6 in. glass disk. The letter fonts are arranged in circular position (equi-distant from the disk axis) in half-circle form. Each of these half-circles contains 128 characters. There are eight lenses in the photographing unit, thus each font is available in eight different point sizes.

ATF-Hadego Photocompositor

A number of slides were thrown on the screen to explain the ATF-Hadgeo Photocompositor. This is the photographic equivalent of the Ludlow hot-metal composing machine.[3] This system of photo-typesetting is based to a large degree on the Monotype hot-metal system. Four machines are included: The keyboard which punches the ribbon as in the hot-metal machine, the line projector, the proofing machine, and the makeup machine.

London Monotype Machine

A brief description was given by Mr. Tranter of the prototype machine sponsored by Monotype Corporation of London, Eng. At the moment, letter characters can be composed and photographed at 140 per min. Just now the machine is limited in composition to 4½ pts. to 14 pts. up to 60 pica measure. A master negative similar to that of the Westover machine (photographic die case) is used.

Mailroom Session

At Tuesday afternoon's Mailroom session, H. S. Young of T. W. & C. B.

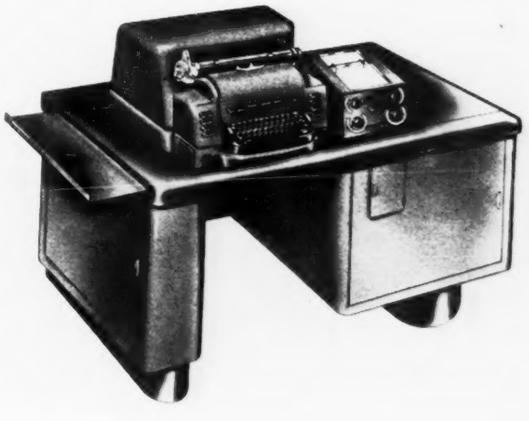


Fig. 2.—Prototype drawing of the Lumitype machine sponsored by Graphic Arts Research Foundation. Reg Tranter, Mechanical Supt., Boston *Herald* and *Traveler*, stated at the ANPA Mechanical Conference in Buffalo that it will be in operation by the middle of August.

[1]Partial descriptions of the Fotosetter have been published in *Printing Equipment Engineer* at various times, the latest being p. 43, April 1950 issue.

[2]For description of this equipment see p. 27, Nov. 1949 issue of *Printing Equipment Engineer*.

[3]Illustrated and described fully on p. 38, April 1949 issue of *Printing Equipment Engineer*.

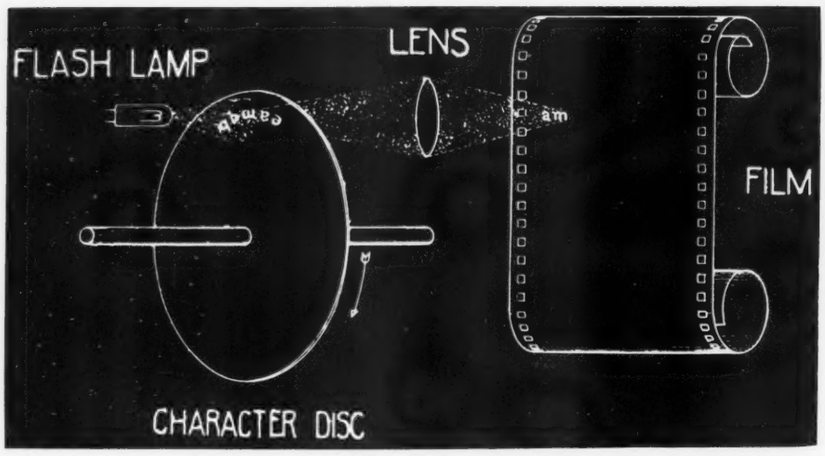


Fig. 3.—Diagrammatic representation showing principle of operation of photographic mechanism of the Lumitype photo-typesetting machine. This diagram was shown in slide form at the Buffalo ANPA Mechanical Conference by Reg Tranter, Mechanical Supt. of the Boston *Herald* and *Traveler*. The 1/16 in. thick, 6 in. diam. glass disk shown revolving clockwise continuously at high speed, bears the letter characters arranged in circular form. The lamp is stroboscopic and its flashes are 1/2,000,000 sec. duration. The lamp rays pass through the selected letter character, then through the lens onto the film or sensitized paper (whichever is being used). Suitable mechanisms are provided for reducing or enlarging the letter character on film or paper and the film or paper is moved automatically for each setwidth of the letter character and also linewise as photographic composition proceeds.

Sheridan Co., exhibited a movie showing the Sheridan newspaper stuffing machine in use in the New York *Herald-Tribune* plant. After conclusion of the presentation, Mr. Young, in answer to a question from the floor, stated the present price is $35 thousand for an 8-station inserting machine which will assemble 12 thousand copies per hr. Philadelphia Inquirer's Business Mgr. George Neil stated that good results are obtained in his plant with a similar machine.

E. R. Hatton, Circulation Director of the Detroit *Free Press* prepared a paper in which was discussed design and development of the newspaper bundle tying machine, Model SRIC built by the National Bundle Tyer Co. The paper was read by G. P. Saxton. The machine accepts loose papers in stacks of up to 18 in. high either manually fed or direct from a conveyor. The machine uses sisal, jute or hemp twine of any ply up to 3/16 in. diam.

A. E. Katz, Project Engineer of the Toronto *Star's* Research and Development Dept., showed a movie illustrating operations in the *Star's* mail room. Both the Wallastar wire tying machine and the Starstarter were shown in operation in this mechanized mailroom.

C. P. McArthur explained the new model Dick Hand Mailer. With it from 7 to 8 thousand labels can be attached per hr. In answer to a query from the floor he said: "At the moment there is no production schedule, no price and no delivery date."

Joe Menard, Mailroom Supt. of the Des Moines (Ia.) *Register* and *Tribune*, read a paper on mailroom operation and acted as monitor during the brief discussion. He reviewed the changes which have taken place in the mailroom during the last half-century. He also discussed modern mailroom methods and development. Mr. Menard, incidentally, was responsible for introducing the mailroom clinic at the 1941 Buffalo conference.

During the Newsprint Handling section of the Tuesday afternoon session, R. A. Cooke, Manager, ANPA Traffic Dept., discussed newsprint shipping damage. He asserted that chafing is a minor cause of damage. He called attention to the necessity for publisher supervision at newsprint unloading points to reduce damage claims which are used by railroads as a basis for demanding heavier wrappers.

T. H. Bartel of Commercial Marine Terminal, Detroit, exhibited a movie showing how the firm handles newsprint for the Detroit *News*. Through equipment developed by the Clark Equipment Co., he explained how 80 T. of newsprint in rolls can be taken from the ship's hold, stacked vertically three high in the warehouse in five gang hours. The handling trucks are equipped to swivel a roll from horizontal to vertical position, as well as vice versa, in small floor space. The crane on the dock reaches down in the hold of the ship and brings up three rolls in one grab and stacks them on dollies ready to be picked up by the migrating trucks.

ANPA-AAAA Joint Report

The ANPA-AAAA Joint Committee report was presented on Tuesday even-

(*Continued on Page 64*)

Gravure Research Elects Officers

James V. Noel, Detroit Gravure, Inc., Detroit, was elected President of Gravure Research, Inc., at its Third Annual Meeting, held at Battelle Memorial Institute, Columbus, O. He succeeds C. J. Murray, Triangle Publications, Inc., Philadelphia, who will continue on the Executive Staff as a member of the Board of Directors.

Martin J. Tiernan, Art Gravure Corp. of Ohio, Cleveland, was named First Vice President, and R. A. Davis, Kable Printing Co., Mt. Morris, Ill. was named Second Vice President. Theodore J. Stulz, Parade Publications, New York, was elected Secretary-Treasurer, and J. Homer Winkler, Battelle Institute, was appointed Assistant Secretary.

Newly elected Directors are Mr. Murray; J. Harry Molitor, Art Color Printing Co., Dunellen, N. J.; and Robert H. Simpson, C. T. Dearing Co., Louisville, Ky.

A report on the research on gravure printing in progress at Battelle Institute was given and the membership voted to continue this work. Research on carbon tissue is essentially completed, and etching is to receive major attention next year. The secretary's report also showed that three new members had entered the organization in the past year. The new members are Parade Publications, Inc., New York; Shellmar Products Co., Mt. Vernon, O.; and Harris-Seybold Co., Cleveland. The total membership of the organization now stands at 18 firms.

Repro Proofing Methods To Be Investigated

According to Executive Secretary Frank M. Sherman of the Intl. Typographic Composition Assoc., a committee has been appointed by President Frederick H. Lutz of ITCA. The function of the committee will be to test and develop materials of various kinds for use in producing the highest obtainable quality of black-on-white and transparent proofs for use in Offset, Gravure and Photoengraving and for other purposes.

The personnel of the committee is as follows: Chairman, Alex G. Highton, Newark, N. J.; Sol M. Cantor of The Composing Room and Ralph Speece of H. O. Bullard, both of New York, N. Y.; Arthur J. Meyer of John C. Meyer & Son and Joseph Schwartz of Westcott & Thompson, both of Philadelphia, and I. Albert Grabmeyer of Grabmeyer Offset Service, Detroit.

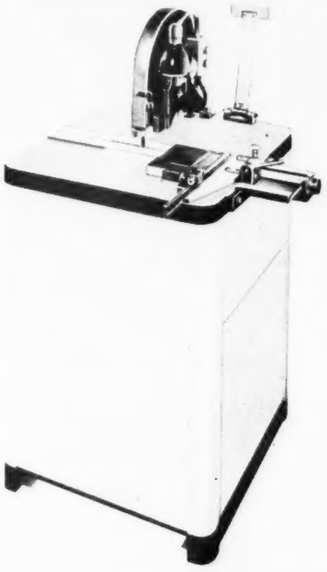
Linotype Faces Chosen

Linotype Baskerville and Caledonia were among the type faces selected by designers of the 51 books chosen this year for the Annual Textbook Exhibition of the American Institute of Graphic Arts, according to an announcement by Mergenthaler Linotype Co. Of 30 Linotype-set books, other type face choices include Granjon, Fairfield, Electra, Janson, Times Roman, Century Expanded and Old Style No. 7.

Equipment & Supplies

Rouse Plate Saw

ON THE new Rouse Printing Plate Saw, with automatic feed, manufactured by H. B. Rouse & Co., 2214 North Wayne Ave., Chicago 14, a number of features have been designed into the machine to make it usable for sawing by photoengravers, stereotypers and printers in the composing room. On it may be cut mounted or unmounted zinc and copper photoengravings, shell cast stereotypes and plastic plates. Manufacturer states cuts may be sawed to any specifications required by the printer in picas, points, quarter points or inch measurements.



Rouse Printing Plate Saw, designed for printers, photoengravers and stereotypers, announced by H. B. Rouse & Co.

To give some idea of its cutting capacity, manufacturer states 15 in. of type high work may be cut in 17 sec., due to the speed of the automatic feed. The blade cutting width is a scant 2 pts. wide. It is further explained that an accurate cut is obtained through the use of a skip-tooth saw blade which is supported by ball bearings immediately above and below the cut and by guides at the side of the cut.

In operation, the operator places the plate on the pica-point measuring gauge on the table top; which holds the plate against the side guide, the operator sets the gauge and the automatic feed is then put into action.

To prepare the work for the first cut, the operator swings the gauge to the cutting line desired. The gauge swings up to 15 deg. in either direction. For the next three cuts, the gauge is automatically locked in the proper right-angle position by turning a cam lever. At the end of each cut, the table feed mechanism is disengaged by an automatic throw-out. Waste materials fall through an opening in the cabinet.

Floor space of 26 in. by 27 in. is required. In addition, there is a 7 in. table overhang at the front to accommodate the automatic feed. The machine is powered by a ½ h.p. motor; can be equipped with 3 ph. or 2 ph., 220 v., 60 cy. or 50 cy. a.c. motor, or a 230 v. d.c. motor.

Manufacturer also states the Rouse Plate Saw eliminates manual squaring up, guessing alignment, removing burrs and other operations especially in the case of adhesive flush-mounted cuts.

Miller Parts Catalog

THE Miller Printing Machinery Co., 1117 Reedsdale St., Pittsburgh 33, Pa., has issued a press parts catalog for the Miller 21 in. by 28 in. TW Press. All principal parts of the press are illustrated and numbered for reference in the 48 page catalog. The automatic lubrication system and V-Belt arrangement are also illustrated. Nomenclature of each part is listed in a numerical list of parts. The catalog, measuring 9 in. by 12 in., was printed by letterpress on 80 lb. enamel.

Steel Stamp Bulletin

MECCO Safety Steel Stamps for industrial marking applications are described in a four-page bulletin issued by M. E. Cunningham Co., 115 E. Carson St., Pittsburgh 19, Pa. Included in the bulletin are details on dimensions, character sizes and prices for the various sizes and styles. Letters and figures for heavy and light duty general industrial marking are among the steel stamps described.

Squirrel-Cage Motors

POLYPHASE squirrel-cage motors from ½ to 600 h.p. are illustrated and described in a bulletin issued by Star-Kimble Electric Co., 200 Bloomfield Ave., Bloomfield, N. J. Construction and assembly details, and speed-torque curves at varying full-load torque percentages for the three different types of the drip-proof motors, are included in the two-color bulletin.

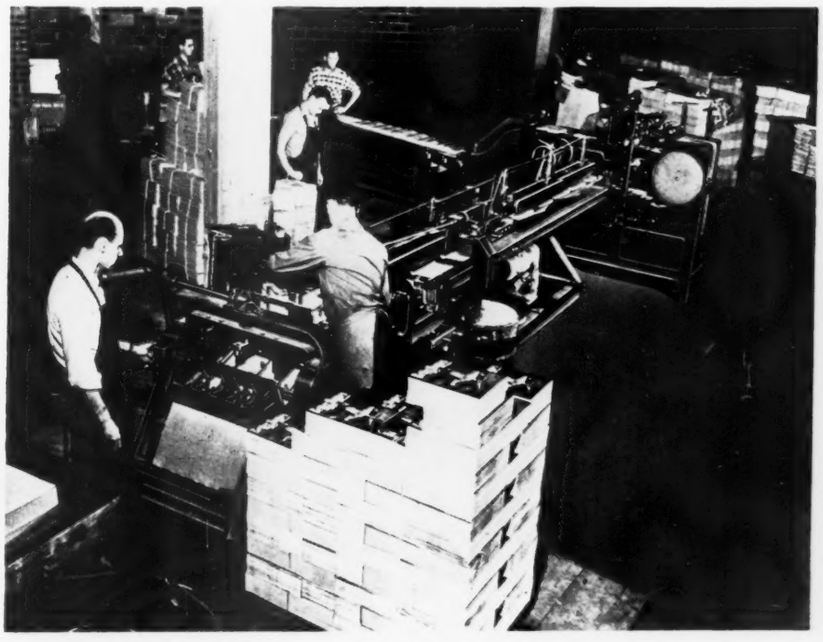
Magazine Wrapping Machine

MAGAZINES may be either flat wrapped or fold wrapped on the Collmar Wrapping Machine announced by the Collmar Corporation, 35 E. Wacker Dr., Chicago. The switch from flat wrapping to the fold wrapping operation is accomplished by swinging a book folding flare into position.

The machine will flat wrap books from 5 in. by 7 in. to 11 in. by 14 in. with a thickness from 3/32 in. to 1¼ in. and will fold wrap books from 6 in. by 9 in. to 11 in. by 14 in. with a thickness from 1/16 in. to ⅜ in. Spring loaded folding flares adjust themselves to minor variations in book trimming, eliminating loose wraps, states the sponsor.

A square, tight wrap is insured by equipping each folding position with pressure rollers. The imprint unit of the machine can be equipped to address with either a Speedaumat, a Cheshire Mailing Head or from hopper fed pre-addressed labels. The machine will also band magazines, applying bands varying in size from a 2 in. width to the full length of the book.

Under normal conditions, claims the sponsor, the machine has a speed range of from 7200 to 10,000 wrapped, addressed and imprinted books per hr. A minimum crew of three is required to operate the machine.



The Collmar Wrapping Machine which is designed for either flat wrapping or fold wrapping magazines. The switch from flat wrapping to the fold wrapping operation is accomplished by swinging a book folding flare into position.

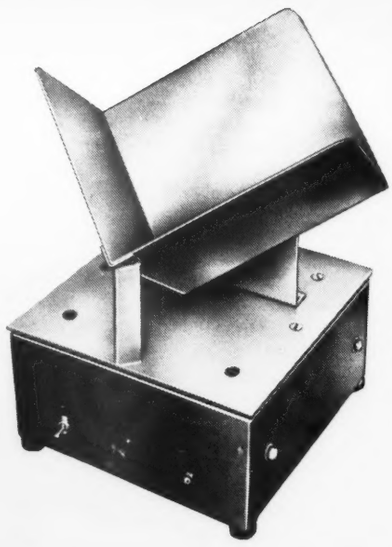
Miller 19 in. by 25 in. Press

MILLER Printing Machinery Co., 1117 Reedsdale St., Pittsburgh 33, Pa., has announced the Miller 19 in. by 25 in. SG Automatic Cylinder Letterpress press. Features of the press include a rotary ink mill distribution system and a counter-balanced feedboard lift which permits the operator to raise the feedboard with one hand.

Operating speeds of the press range from 2750 to 5000 sheets per hr. A one-piece box type side and wayframe construction with integral bed rails are similar to the Miller TW and SW presses. Feeder mechanism swings away permitting access to the type bed.

Specifications: max. sheet size, 19 in. by 25 in.; min. sheet size, 7 in. by 10 in.; max. form in chase, 18½ in. by 23½ in.; max. form on bed, 18½ in. by 25 in.; overall length, 11 ft. 9⅜ in.; width with feeder swung open, 6 ft., 9½ in.; highest point with delivery raised, 5 ft., 8½ in.; to top of cylinder; 3 ft., 6⅜ in.; net weight, 8050 lbs.

Miller executives view the Miller 19 in. by 25 in. SG Automatic Cylinder press at a recent sales meeting in Pittsburgh. From left to right: A. A. Saul, Vice President; A. E. Searle, Vice President; W. W. Hicks, Philadelphia Branch Manager; Gordon Montgomery, President; D. J. Casey, Vice President; and R. B. Tullis, Vice President.



Paper Jogger—A bin type paper jogger has been announced by Syntron Company, Homer City, Pa., which may be converted into a flat top jogger by removing the bin. The bin that holds the paper measures 10 in. by 10 in. and is 6 in. deep. It is mounted on its point on the vibrating table so that the paper sheets slide or jog to two edges. The bin, vibrating at high speed by a pulsating electro-magnet, has rheostat control of the amplitude or power.

TAKK Static Control

DESIGNED for controlling the hazard of fire or explosion due to static where highly volatile solvents are present in gravure printing, printing on plastic sheets, photographic film processing, and rubber and plastic coating operations, is the TAKK Static Control. Announced by The John Hewson Co., 106 Water St., New York 5, N. Y., sponsor claims the equipment will control static on any type of material and on most types of machines running in excess of 2000 f.p.m. The Static Control operates from any electrical outlet and has a current consumption of less than 15 w. per bar.

Roll Leaf Broadside

APPLICATIONS, equipment required, colors feeds, delivery, type, dies, etc., for roll leaf stamping are explained in a two-color broadside issued by Peerless Roll Leaf Co., Inc., 4511 New York Ave., Union City, N. J. Roll leaf stamping is a method of engraving designs or lettering in color into the surface of such materials as paper, cloth, textiles, board, fibre, leather, hard rubber, plastics, wood, etc. Some heavily enamelled or lacquered metal surfaces also lend themselves to roll leaf stamping, it is stated. A description, illustration and specifications of the various models of the Peerless Roll Leaf Stamping Press are included in the broadside.

Scented Printing Ink

FORMULATION of a special ink which the sponsor claims can carry up to 30 per cent of the essential oils necessary to produce a desired odor on a printed page, has been announced by Sigmund Ullman Co., Div. of Sun Chemical Corp., 10th St. and 44th Ave., Long Island City 1, N. Y. It is stated that the vehicle used in the ink retains the odor and permits it to remain untrapped in the ink for a long period of time. Sponsor claims the scented inks do not affect rollers or cause delay in washing up the press, and can be run satisfactorily on practically any paper. Paper and ink specifications should be submitted to the ink manufacturer when using an odorized ink.

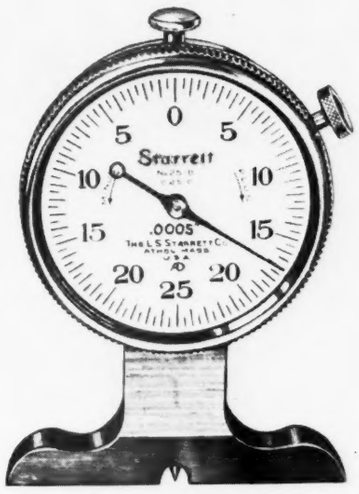
IPI Color Picker — A pocket size device designed to give the package printer and designer choices for multicolor designs, is available from International Printing Ink, 650 Eleventh Ave., New York 19, N. Y. Designated the IPI Color Picker, it consists of 40 3½ in. by 5 in. clay coated colored cards, 12 color circles for accents and instructions for use. Users may work out color schemes by overlapping various cards and accenting with circles. All pieces are numbered and cards list those colors best suited for harmonious and contrasting schemes. All colors in the Color Picker are keyed to the IPI Color Guide for Boxboard.

Dehumidification Bulletin

PROBLEMS caused by high humidity and means of correction are discussed in a four page bulletin entitled *A Few Facts About Dehumidification for Industry* issued by Abbeon Supply Co., 58-10 41st Drive, Woodside, New York, N. Y. It is explained in the bulletin that moisture may be removed from the air by a full air conditioning system, by various substance and chemicals, or by installation of an Abbeon Heavy Duty Dehumidifier.

Starrett Push-Down-Point Dial Depth Gauge

THE Starrett Dial Depth Gauge No. 643 is operated by pressing down the push button at the top of the case so that the needle point contacts the surface the depth of which is to be measured.



Starrett Dial Depth Gauge for measuring the depths of etch in halftones, announced by The L. S. Starrett Co.

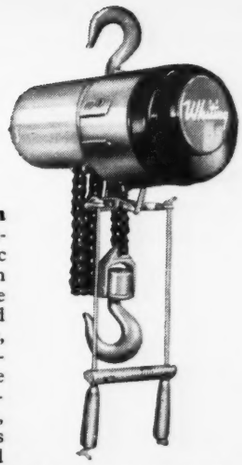
The Starrett Dial Halftone Depth Gauge is manufactured by The L. S. Starrett Co., Athol, Mass. The knife edge base is 2½ in. long and in combination with the needle-point rod permits exact positioning of the needle point relative to the surface to be measured, especially in restricted areas. The center of the base is cut away to permit unobstructed view of the needle point. Base and point are hardened, ground and lapped.

Depths of etch in halftones up to 0.125 in. are registered directly on the dial in 0.001 in., or plus or minus variations can be directly measured since the dial is of the balanced type adjustable relative to zero.

Adjustable Speed Bulletin

A SUMMARY of the advantages of properly applied adjustable speed and a check list of points to consider in selecting an adjustable-speed drive are presented in a 24 page bulletin issued by General Electric Co., Schenectady, N. Y. A chart listing various packaged adjustable-speed drives, range of application and performance features is also included. The bulletin is well illustrated showing various industrial applications of these drives. Two-color diagrams are helpful in explaining the main points to check when installing electric adjustable-speed drives.

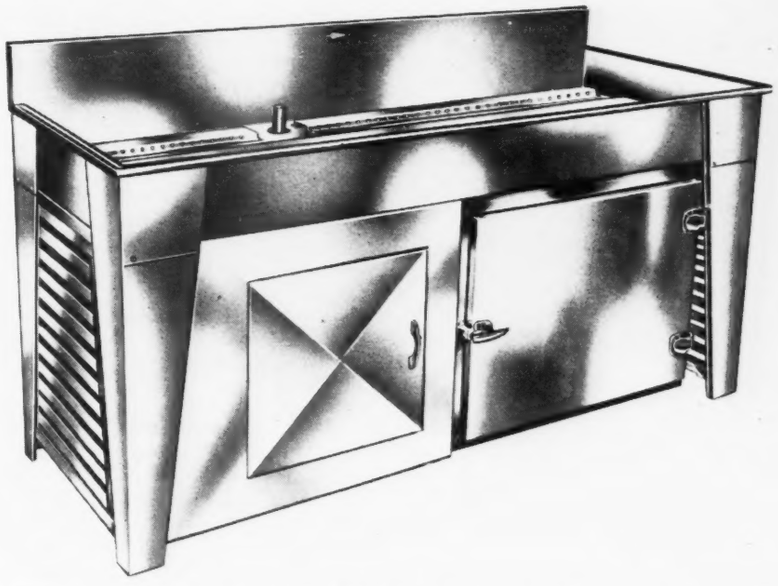
Vertical Aftercooler — A small vertical aftercooler designed to cool and dry small quantities of compressed air, has been announced by Jas. A. Murphy & Co., 5th and Vine Sts., Hamilton, O. Designated Murphy Type V-907 Aftercooler, the attachment is available in two sizes. The smaller size measures 30 in. overall and cools up to 20 c.f.f.a.p.m. (cu. ft. free air per min.). The larger size measures 48 in. overall and cools 30 to 50 c.f.f.a.m.p. Hot air entering the cooling chamber from the intake at the bottom left is guided slowly about cooling tubes to the outlet at the top center. Separated moisture drops by gravity to the trap below the bottom head, from which it is ejected as collected. Water inlet is shown in the illustration at the lower right of the unit, and water outlet, with sight-drip connection is visible at top right.



Electric Chain Hoists—An improved electric roller-chain hoist available in ¼, ½, 1 and 2 T. capacities, has been announced by the Whiting Corporation, Harvey, Ill. The hoists are designed with a spring-set, shoe-type motor brake, in which the lining is bonded to the shoe. The pull cord has been relocated at the center of the hoist frame to safeguard against tipping when the control cord is pulled. The control switch also is relocated and protected from damage by a switch mounting. The improved design provides access to the switch wiring and motor brake.

Data Sheet Available

USERS of corn, tapioca or potato base for industrial applications will find use for a Dry Dextrine or Starch Product Operation Data Sheet issued by Morningstar, Nichol, Inc., 630 W. 51st St., New York 19, N. Y. The data sheet is a step-by-step recording of necessary information required for proper analysis of dextrine and starch product problems.



Robertson Temperature Controlled Sink — A stainless steel temperature controlled sink which is claimed will control developing bath temperatures to within 1 deg. F., has been designed for the photoengraving and offset plant by R. R. Robertson Co., 3067-79 Elston Ave., Chicago 18, Ill. Equipped with G-E refrigeration and Chromalox heating units, the sink is designed with a working top which accommodates three standard size developing trays for developer, stop bath and fix. Trays are supported on a series of stainless steel channels to permit contact and circulation between coolant and tray bottoms. Available to accommodate the following tray sizes: 20 in. by 24 in.; 26 in. by 30 in., and 30 in. by 40 in. Height from floor to tray edge is 36 in.

New headquarters of The M. L. Abrams Co. at 1729 Superior Ave., Cleveland, O. An open house and equipment show marked the opening of the new site.

Abrams Holds Open House

Formal opening of new quarters for The M. L. Abrams Co. was held recently when the firm held a three-day open house. The Abrams company is now located at 1729 Superior Ave., Cleveland 14, O. On display during the open house were such items of equipment as the Cyclone Rubber Platemaker, Master Paper Folder, Tally-Tab Counter and Marker, Ortman Power Spray Gun, GBC Plastic Binding Machine, Bauer Types, Scotch Tape Pamphlet Sealer, and other pressroom, composing room and bindery items. Manufacturers' representatives were on hand to demonstrate their own equipment.

Moe L. Abrams, President and General Manager of The M. L. Abrams Co.

Also represented were American Stitcher Co., F. P. Rosback Co., Nygren-Dahly Co., Acme Steel Co., Challenge Machinery Co., Jog-A-Way Paper Joggers, H. B. Rouse & Co., The Morrison Co., Nolan Corporation, Pioneer Toledo Corp., Thompson Cabinet Co., Felins Tying Machine Co., Chandler & Price Co., The Colson Corp., Halverfold Kwinkprint Co., Justrite Mfg. Co., Perfection Mfg. Corp., Alchrome Bindery Trucks, Virkotype Corporation, Southworth Machine Co., Paasche Airbrush Co., Miller-Trojan Co., Universal Mono-Tabular Corp., and Hilton Bradley Co.

Also open for inspection was the company's equipment remanufacturing department.

At the time of going to press it was announced by officials of the Abrams company that due to favorable results of the June open house, the equipment show and open house would be repeated again on July 13, 14 and 15.

MLCo. Acquires Davidson

The Mergenthaler Linotype Co., Brooklyn, N. Y., has announced acquisition of a controlling interest in the Davidson Mfg. Corp., Chicago. President Martin M. Reed, of Mergenthaler points out that this purchase fits into Linotype's plan for diversification within the Graphic Arts field.

The Davidson Mfg. Corp. manufacturers rotary offset presses, folders, feeders, and supplies for offset printing. Linotype felt it could fill a need by providing companion equipment for its line-casting machines and their related parts and supplies.

The Davidson press, it was stated, increases the scope and versatility of the average printing establishment. The present model is a double-duty 10 in. by 14 in. press, capable of handling both letterpress and offset work. It has been widely adopted by printers for handling specialized tasks efficiently and economically. It will accommodate both metal and paper offset plates, rubber plates, metal type and slugs, and curved electrotypes. It will perform auxiliary functions such as imprinting, repeating short runs, numbering, etc.

Davidson also manufactures other important equipment: A 10 in. by 14 in. parallel folder, a 14 in. by 20 in. parallel folder, a 14 in. by 20 in. 4-fold right-angle folder, and suction and friction feeders in standard sizes up to 14 in. by 20 in., along with plates and supplies for offset printing.

The Davidson Mfg. Corp. will continue to manufacture products bearing the Davidson name, and distribute them through its existing sales organization.

DeVilbiss Plant

Announcement has been made that the DeVilbiss Company will soon establish a manufacturing plant in Somerset, Pa. The announcement was made at the company's general offices in Toledo, O.

REGENSTEINER PLANT MANAGER Thomas P. Mahoney, of Cleveland, has been made Plant Manager for the Regensteiner Corporation, Chicago, effective August 1. For a number of years, Mr. Mahoney has been General Manager for American Color Process Co., Cleveland. Previously, he had been Production Manager for American Greeting Publishers. He is Chairman of the Technical Commission, Intl. Assoc. Printing House Craftsmen.

ATF Acquires Mann Presses

AMERICAN Type Founders Sales Corp. has added 13 new sheet-fed offset printing presses to its line, according to E. G. Williams, the company's president. This action is a major extension of the range of ATF equipment in the offset field and will supply sizes not made presently by ATF.

These presses, manufactured by George Mann & Co., Ltd., a subsidiary of Vickers, Ltd., of London, will supplement the ATF Chief and the ATF-Webendorfer web-fed offset presses. The newly added units will be known as ATF-Mann offset presses.

American Type Founders has purchased the Plaza Machinery Corp., New York, N. Y., previous Mann distributors for the United States. "In acquiring Plaza, ATF was enabled to make long-term arrangements covering many years for the distribution, sales and servicing of ATF-Mann presses throughout the United States and its territories," said Mr. Williams. ATF factory-trained installers and servicemen will be available, and complete stocks of parts will be maintained.

The ATF-Mann presses include: Six single-color presses in sizes from 22 in. by 34 in. to 42 in. by 65 in.; six two-color presses in sizes from 22 in. by 34 in. to 43 in. by 65 in.; a perfecting press with a maximum sheet of 38 in. by 53 in.

Mr. Williams also announced ATF will have complete engineering drawings and details of each unit to assure long-term service continuity and guarantee owners against any possible contingency.

The new ATF-Mann presses will be an integral part of the ATF exhibit at the Graphic Arts Exposition in Chicago in September. Delivery to American printers will be on a satisfactory delivery schedule, according to Mr. Williams.

Recent Monotype Installations

Some of the recent installations of Monotype letterpress and photo-mechanical equipment, as reported by Lanston Monotype Machine Co. are as follows:

Material Making

California—Moore Business Forms, Pacific Manifolding Book Div., Los Angeles.
Georgia—Macon Telegraph Pub. Co., Macon.
Illinois—Desaulniers & Co., Moline; Northwestern Pub. Co., Danville.
Indiana—South Bend Tribune, South Bend.
Massachusetts—E. Anthony & Sons, Inc., New Bedford.
Michigan—The Evening News Assoc., Detroit.
Ohio—Dispatch Printing Co., Columbus; Miami Systems Corp., Cincinnati.
Wisconsin—Oshkosh Northwestern Co., Oshkosh.
Canada—Montreal Star Co., Ltd., Montreal; Mortimer, Ltd., Ottawa.

Caster and/or Keyboards

Colorado—C. F. Hoeckel Bank Book & Litho Co., Denver.
Illinois—R. R. Donnelley & Sons Co., Chicago.
Indiana—W. B. Conkey Div., Rand McNally & Co., Hammond; Pilgrim Pub. House, Indianapolis; The Typographic Service Co., Inc., Indianapolis.
Iowa—Meredith Engineering Co., Des Moines.
Maryland—Waverly Press, Inc., Baltimore.
Missouri—Western Typesetting Co., Kansas City.
New York—Blanchard Press, New York; McKellar & Platts, New York; Scripps-Howard Supply Co., (For N. Y. World-Telegram & Sun, New York).
Pennsylvania—N. W. Ayer & Son, Philadelphia; Bethlehem Steel Corp., Bethlehem; The Eddy Press Corp., Pittsburgh; Lancaster Press, Inc., Lancaster.
Texas—Jaggars-Chiles-Stovall, Inc., Dallas.
Virginia—Everett Waddey Co., Richmond.
Canada—Dept. of Public Printing & Stationery, Ottawa; School of Graphic Arts, Montreal; Typographic Service, Toronto.
South America—Elaboradora de Metales, S. A., Montevideo, Uruguay; Irmaos Andrioli y Cia, Sao Paulo, Brazil.

Cameras and Equipment

Connecticut—Muirson Label Co., Inc., South Meriden.
Illinois—Goss Lithographing Co., Chicago.
Maryland—Neo-Lith Colorcraft, Inc., Baltimore.
Massachusetts—Rust Craft Publishers, Inc., Boston.
New Jersey—Gravure Cylinder Corp., Hoboken.
New York—Fredrick Photogelatine Press, Inc., New York; Litho Poster Corp. of America, New York.
Ohio—A. L. Garber Co., Ashland.
Wisconsin—Western Printing & Litho Co., Racine.

Wood Equipment

Recent purchases of Wood press equipment as announced by Wood Newspaper Machinery Corp. include a six-unit press, double folder, and reels and pneumatic tensions by the Providence (R. I.) *Journal-Bulletin*; three standard units, reels, pneumatic tensions, and Autopasters by the St. Louis (Mo.) *Post Dispatch*; a 40-page Cosmopolitan Press by the Daytona Beach (Fla.) *News-Journal*; and a 24-page Cosmopolitan Press by the Columbus (O.) *Hilltop Record*. The Newark (N. J.) *Star-Ledger* purchased six Wood reels, pneumatic tensions, and Autopasters for installation under a Hoe press.

During March, April and May, stereotype equipment has been ordered by the Gastonia (N. C.) *Gazette*; New Bedford (Mass.) *Standard-Times*; Lima (O.) *News*; Chicago *Tribune*; Daytona Beach (Fla.) *News-Journal*; Canton (O.) *Repository*; Fargo (N. D.) *Forum*; New York *Daily News*; Gary (Ind.) *Post-Tribune*; Chattanooga (Tenn.) *News-Free Press*; Columbus (O.) *Hilltop Record*; Miami (Fla.) *Herald*, *Le Petit Journal*, Montreal, Que.; Temple (Tex.) *Telegram* and Washington (D. C.) *Post*.

Harris-Seybold Installations

Some of the recent equipment installations reported by Harris-Seybold Co. covering the period from April 1 to May 20, 1950, are as follows:

Offset Presses

Alabama—Paragon Press, Montgomery.
California—Charles R. Hadley Co., Los Angeles; Jeffries Bank Note Co., Los Angeles.
Delaware—Wm. N. Cann, Inc., Wilmington.
Illinois—Weber Lithographing Co., Chicago.
Indiana—J. C. Collins & Co., Indianapolis; Shumate, Inc., Lebanon.
Iowa—Hundley Printing Co., Clinton; Pinney Printing Co., Clinton; Stoyles Press, Mason City.
Michigan—Courier Press, Inc., Detroit; Safran Printing Co., Detroit.
Minnesota—Bureau of Engraving, Inc., Minneapolis; Perkins-Tracy Printing Co., St. Paul.
New Jersey — Multi - Color Lithographers, Inc., Newark.
New York—Peter F. Mallon, Inc., Long Island City; Wainick Litho Co., New York.
Ohio—A. L. Garber Co., Ashland.

Paper Cutting and Processing

District of Columbia — Drake Press, Washington.
Florida—Drummond Press, Jacksonville.
Illinois—John Baumgarth Co., Chicago; Lakeside Central Co., Chicago; Sheldon Printing Corp., Chicago; Wire-O-Binding Co., Chicago.
Massachusetts — Colourpicture Publishers, Inc., Boston.
Michigan—Kalamazoo Stationery Co., Kalamazoo.
Missouri—Fowler Envelope Co., Kansas City; Western Tablet & Stationery Co., St. Joseph; Woodward & Tiernan Printing Co., St. Louis.
Nebraska—Burkley Envelope & Printing Co., Omaha.
Ohio—McBee Co., Athens; Dobeckmun Co., Cleveland; Millcraft Paper Co., Cleveland.
Tennessee—Laycock Printing Co., Jackson; Ambrose Printing Co., Nashville.

Shulman Equipment Sales

Ben Shulman Associates, Inc., has announced the sale of mechanical plant equipment of the Bristol (Tenn.) *Virginia-Tennessean* to the Republic of the United States of Indonesia. The equipment will be put into operation in the Government Printing Office of the Indonesian Republic. The equipment included a 32 page Goss press, five Linotypes, Ludlow, Elrod, and Chemco photoengraving equipment.

Porter Reports Europe Visit

At a press conference on June 8 with representatives of printing, lithographing and advertising trade journals in New York, N. Y., Harry A. Porter, Vice President, Harris-Seybold Co., Cleveland, and President of the national Direct Mail Advertising Assoc., discussed the Graphic Arts industry in Europe as he had observed it in a whirlwind four-week business trip abroad.

Stressing that his visit was made too hastily to permit authoritative statements, Mr. Porter nevertheless was able to form general opinions.

The main objective of his trip, said Mr. Porter, "was to review the export situation at first hand with Harris-Seybold's dealers and sub-dealers. Nine days were spent in England and then the following countries were visited in this order: Italy, Switzerland, Belgium, West Germany, Sweden, Denmark and France.

"Fortunately" said he, "I had over a week in England and spent considerable time at the British Industries Fair—practically all of it in the printing machinery section. Impressions of the Fair were generally favorable. I could not help but notice, however, that quite a large number of machines on exhibit were more or less in experimental stages. This was particularly true of machines made by newcomers in the field and less noticeable in the exhibits of well-established concerns.

"I only saw a few printing, lithographing and binding plants, but the ones I did see measured up to the plants we have in the States, from the standpoint of beautiful buildings and grounds. Few of them had printing and binding equipment that compared favorably with equipment in America. Undoubtedly the best lithography is being done in Sweden, Holland, Belgium and Switzerland. Some plants in other countries are doing splendid work. The universal complaint is lack of good paper, good ink and modern equipment. Everywhere it was hard to convince people that the samples of work I brought with me were produced on a four-color press in only four colors."

The fine quality of some European printing and lithographing, in Mr. Porter's opinion, is due more to trained technicians and more time for preparation than it is to actual efficiency of the machinery. "In many respects," he said, "conditions have not changed too much in Europe and England since my last trip in 1929. Almost uniformly, wages average 50c to 65c per hour, or about ⅓ of our wages here in the States for craftsmen of the same skill.

"It is difficult to make many people in the foreign countries conscious of our standard of living here in the States," noted Mr. Porter. "They will not believe our average worker has his own car and labor-saving appliances in his home—or that it is not unusual for him to take his family on a week end trip. Bicycles are in evidence everywhere and I did not see a single parking lot for employees' cars."

EXPOSITION PREVIEWS

Pre-views of manufacturer and supplier exhibits to be seen at the National Graphic Arts Exposition being held in Chicago's International Amphitheatre, September 11 to 23, are published for executive readers who will be attending the Show.

American Type Founders — American Type Founders has scheduled nine ATF sheet-fed presses for exhibition at Display Space Nos. 244-260 incl. and 268-272 incl., according to E. G. Williams, ATF president. The presses, which will be in operation, will include three Kellys, a Little Giant and five offset presses.

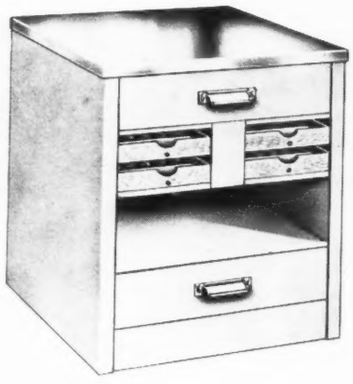
An ATF-Webendorfer web-fed offset press will also be on the floor, operated commercially on a four-color job by a Chicago printer. A complete photomechanical department will be set up, including cameras and an ATF-Hadego photo composition machine.

European type as well as many ATF type faces will be included in a special exhibit. Developments in the educational use of printing will be covered in a separate section. ATF also plans to install a facsimile engineering department, with engineering personnel doing actual printing plant designing and drafting. These engineers will be available for consultation with show visitors on their own specific problems.

The exhibit will be manned by ATF Sales Corp. representatives from Elizabeth and the company's branches throughout the country. Equipment will be attended by operators to demonstrate the working units in the show.

Vandercook Equipment — Vandercook proof presses and pre-makeready methods and equipment will compose the exhibit sponsored by Vandercook & Sons, Inc., at Display Space Nos. 262 and 263. About one-third of the space will be devoted to a typical Pre-Press Dept. where demonstrations will be held on how precision forms can and should be made up. Equipment for making metal base will be shown as well as a new method for mounting halftones and electrotypes. Also demonstrated will be Vandercook Plate Gauges, Make-Up Gauge, Line-up Gauge, Block Leveller and Test Press for forms up to 42 in. wide.

The 5 T. Vandercook 4-Color High Speed Proof Press which, it is claimed, turns out a wet proof within 3 sec. from first to last color, will be demonstrated. Other equipment at the exhibit will include the Vandercook 29-24 High Speed Power Proof Press, the 219AB and 219 ABT Proof Presses with adjustable beds, 22-34 Automatic Inking and Dampening Offset Proof Press, High Speed Safe Electric Galley Proof Press, Hand Operated Galley Proof Press, No. 4 Proof Press for pulling reproduction proofs and a number of smaller hand operated machines.



Hamilton Cabinets — Among several new items of equipment to be shown by Hamilton Mfg. Co. at Exhibit Space Nos. 405, 407, 409 and 410, will be the Hamilton Line-Composing Machine Operator's Cabinet No. 15750. The cabinet is designed with a flat top, permitting a neater arrangement of ad copy layout. It is equipped with two drawers for miscellaneous storage or for storage of matrices. A bin unit and a separate unit carrying four line-composing machine matrix sorts trays are located between the drawers. Overall measurements of the cabinet are 19½ in. wide, 15 in. deep and 22½ in. high.

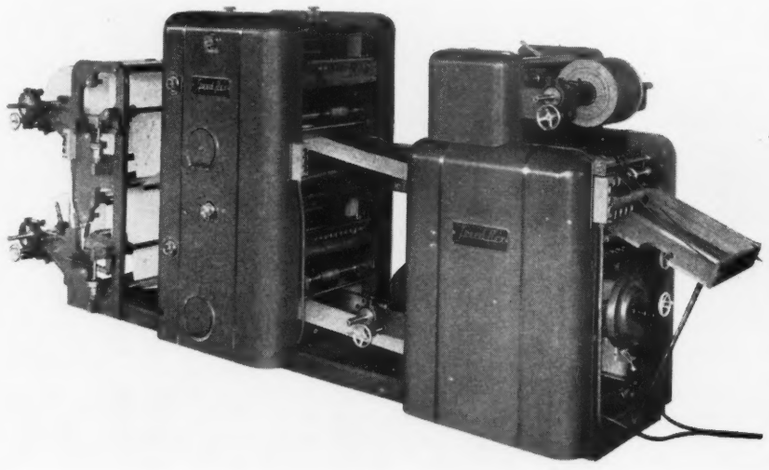
Imperial Type Metal — Imperial Type Metal, Type Metal Fluxes, Mold Polish and Photoengraving Zinc will be on display at the exhibit sponsored by Imperial Type Metal Co., Display Space No. 287. To be exhibited will be production specimens from Imperial type metal and engraving zinc. Visitors will also be afforded an opportunity to view specimens of letterpress printing from Imperial type metal and engraving zinc. The exhibit will be in charge of Clarence Seaman, Vice President.

nuArc Automatic Arc Lamp — Display Space No. 112 will be occupied by nuArc Company representatives, H. R. Benson and J. H. Schultheis, who will demonstrate the new N-110 motor-driven, automatic Arc Lamp for use in platemaking processes. The nuArc Lamp can be used for vacuum frame and copyboards, or on camera brackets, with power control box mounted on wall, floor or wherever convenient, and on photocomposing machines. This new type arc lamp is claimed to produce a controlled light of 7000 deg. Kelvin temp. with uniform intensity within a tolerance of 5% plus or minus.

Speed-Flex Presses — The Model D Speed-Flex Press will be on public display by Orville Dutro & Sons, Inc., at Booth 170. The Model D press will print the face of the web in two colors, imprint and number the same face in a third color and attach a carbon; or will print the face and back of the web, imprint and number the face in a second color and attach a carbon.

The Model D Speed-Flex prints from rubber plates and is designed for printing carbon interleaved forms, salesbooks, deposit slips, laundry lists, telegram and cable blanks, and multi-color work. Adjacent numbers for face imprinting or numbering, slitting, and rotary and cross perforating are identical to the Speed-Flex Model B press.

Representatives of the Dutro organization will also be at the exhibit sponsored by the Pearce Development Co. Orville Dutro & Son, Inc., has been named as the agency for the sale and distribution of the Pearce Multi-Converter press.



The Model D Speed-Flex Press to be exhibited by Orville Dutro & Son, Inc., at Booth 170. Press is designed for printing snap-out carbon forms, order blanks, deposit slips, laundry lists and office forms.

View of upper section of Doyle Infrared Ink Drying equipment attached to rotary web offset printing press.

Doyle Infrared Ink Driers

The principal item to be exhibited by The J. E. Doyle Co. in Exhibit Space No. 177 is a life-size operating installation containing Doyle Press Infrared Ink Driers. The coils in the heater units will be energized and the entire equipment will be operated automatically to rotate the coils away from or against the paper web just as though it were attached to a rotary printing press when the pressman pushes the printing press start and stop buttons.

Other Doyle ink drying units for smaller presses will also be exhibited.

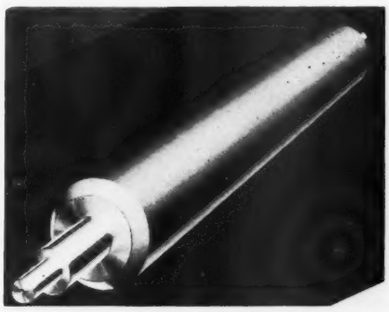
In attendance at the exhibit will be Charles C. Doyle and two sons, James and Donald, who will be pleased to explain and demonstrate the infrared drying equipment to all visitors.

NGAE Association

The National Graphic Arts Education Assoc. will exhibit in Booth No. 196. In general, the exhibit will show the quality of Graphic Arts instruction in the different types of schools of printing in the United States and Canada. Included will be exhibits from typical courses of printing from Junior and Senior High Schools, Trade and Vocational Schools, and Colleges and Institutes. Also, there is an exhibit showing activities and publications of the NGAEA. Ray A. Worst of Hancock Vocational Preparatory School, Chicago is Chairman of the Exhibits Committee. John G. Henderson is President of NGAEA. In addition to other instructors, Educational Director Fred J. Hartman of Washington, D. C., will be in attendance.

Dayco Press Rollers

Dayco letterpress and offset press rollers, lithographic blankets, color separator for split color runs and fountain divider, are to be exhibited by The Dayton Rubber Co. at Display Space Nos. 376-378 incl. Sponsor states that the Dayco Rollers handle special inks and are unaffected by inks and washes. It is designed for use as either a form, distributor or ductor roller. The Dayco Lithographic Blanket will not emboss or deboss, according to the manufacturer, resists chemicals in ink and are not affected by wash-up solutions. The Color Separator enables a one or two color press to print additional colors in a single run. Full control of the fountain at the Divider is afforded by the Fountain Divider, according to the sponsor.



The Dayco Letterpress and Offset Press Roller to be exhibited by The Dayton Rubber Co. at Display Space Nos. 376-378 incl.

Printing House Craftsmen

The International Association of Printing House Craftsmen, Inc., will hold forth in Display Space No. 308. Intl. Exhibit Committee Chairman George Skach tells us that Booth No. 308 will be a gathering or meeting place for all Craftsmen Club members. All local and out-of-town Craftsmen can pause and rest their tired feet. It is planned to erect a Message Board for visiting Craftsmen through which they may contact members while at the Exposition.

The exhibit will be confined to club activities, including Printing Week. The International Association's L-shaped space will have the atmosphere of a comfortable office. The display space will be open for the entire period of the Exposition as well as during the 31st annual convention which will be held at Hotel Stevens, Sept. 10 to 13 inclusive.

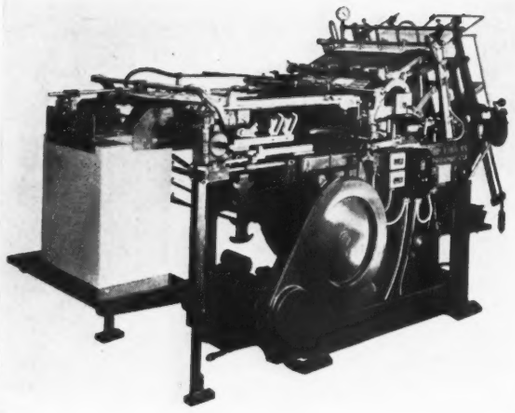
Bourges Process

Original art work, reproductions and newspaper proofs of work done in two and four-colors by the Bourges Colotone Process will be exhibited at Booth 294 by Bourges, Inc. Also on display will be color transparencies which have been corrected by the application of Colotone, Solotone and Transopaque masking sheets.

The Bourges Colotone Process, a method of preparing preseparated color copies, employs seasoned transparent plastic sheets coated with transparent removable colors made from printer's ink. Colors are removable to any shape by use of a plastic stylus or solvent. Lighter colors can be increased to any tone value for halftone reproduction with liquid Colotones and colored pencils.

To advise interested printing executives on the uses of the Bourges process, Albert R. Bourges, President of the firm, and Mrs. J. Bourges Mayfield, Vice President, will be present at the exhibit.

Albert R. Bourges, President, and Mrs. J. Bourges Mayfield, Vice President of Bourges, Inc., will demonstrate a method of correcting color transparencies at Booth 294.



The Banthin 13 in. by 20 in. Horizontal Cylinder Press will be in operation at the exhibit sponsored by Banthin Engineering Co., Display Space No. 160.

Banthin Cylinder Presses

Two Banthin 13 in. by 20 in. Horizontal Cylinder Presses will be in operation at Exhibit Space No. 160, sponsored by Banthin Engineering Co. The press, which has speeds of 2600, 3200 and 3800 i.p.h., is equipped with automatic electric and pneumatic press stops, delivery blow-down system of sheet control and a one piece semi-steel frame weighing 1050 lbs. Floor space required is 38 in. by 94 in. Specifications: max. sheet size, 13 in. by 20 in.; min. sheet size, 3¼ in. by 5½ in.; printing area, 13 in. by 19 in.; chase size, 13⅝ in. by 19⅜ in.; stock range, onionskin to 4-ply cardboard; main drive motor, 1 h.p.; vacuum motor, ½ h.p.; feeder capacity, 12 in. of stock, and delivery capacity, 27 in. of stock. At the exhibit, J. F. Banthin, sr., will be in charge of demonstrations and G. J. Stickley will be in charge of sales promotion.

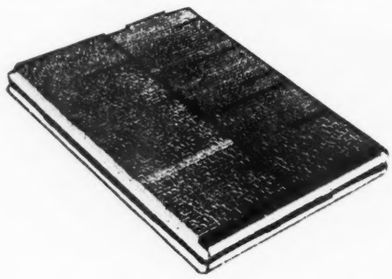
Monotype Mechanical Exhibit

An assortment of letterpress equipment will be operated and exhibited by Lanston Monotype Machine Co. at Display Space Nos. 411-417 incl. The Monotype Keyboard and Composition Caster will be shown as working units. Featured will be the new 1517 arrangement by which capacity is increased from 225 to 255 matrices. The Monotype Giant Caster will be operated during the Exposition on one or more of its products.

Other equipment on exhibit will include the Monotype Material Making Machine; Monotype-Thompson Type Caster; Monotype-Huebner Color Precision Camera, Precision Photo-Composer, Register Device, Vertical Plate Coater, and Universal Process Machine; and the Monotype-Barrett Adding Machine. All machines will be connected to electric lines for power and heat during operation. In charge of the exhibit will be Carl Sorensen, Lanston Monotype Engineer.

Rhiel Galley Locks and Tie-Ups

The Riehl Galley Lock Co. will demonstrate in Display Space No. 110 its full line of Page or Form Tie-Ups and the Side and End Galley Locks. All the necessary equipment to give a practical demonstration of the uses of these items will be provided. The permanent Tie-



Shown in the illustration is a Riehlock Permanent Adjustable Tie-Up nested in grooved reglet.

Ups are adjusted by hand to the size of the type matter to be enclosed by nesting them in grooved reglets surrounding the type matter. The spring-like Galley Locks (both end and side) are easily placed in or removed from the galley. Various size Tie-Ups and Galley Locks are available.

Indexes, Tabs & Specialties

If you have wondered from time to time where you may obtain those clever celluloided indexes which make it convenient for you to quickly locate any section of a directory, catalog or reference work, you can find the full line of such at Booth No. 302 occupied by G. J. Aigner Co., whose regular place of business is at 426 So. Clinton St., Chicago 7. In addition, Aigner will show various kinds of tabs made from real and simulated leather, and celluloid; ring book and post binder indexes; insertable tabbing and other specialties, including cellulose sheet protectors.

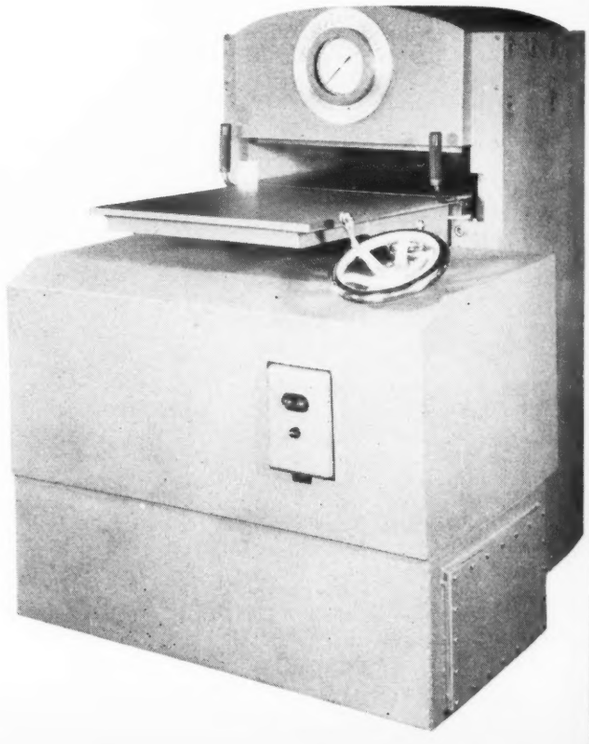
Williamson Molding Presses

A 185 T. Platemaster Molding Press, designed for molding plastic plates, rubber plates and Vinylite electrotype molds, will be in operation at Display Space No. 374 by Williamson and Co., Inc. Materials used in the production of rubber and plastic printing plates for letterpress printing will also be exhibited. Demonstrations of the molding of these plates with Williamson equipment will be made at regular timed intervals.

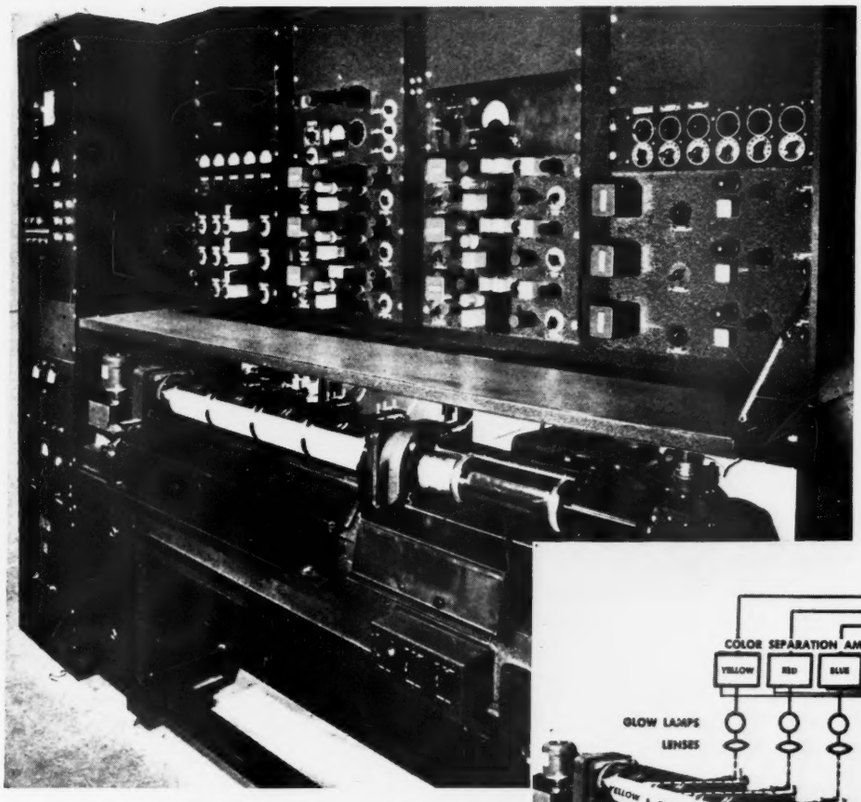
The hydraulic molding press to be exhibited has a maximum pressure of 185 T. The moving platen is guided by four adjustable gibs. Platens normally cored for steam heating are also available with electrical heating elements.

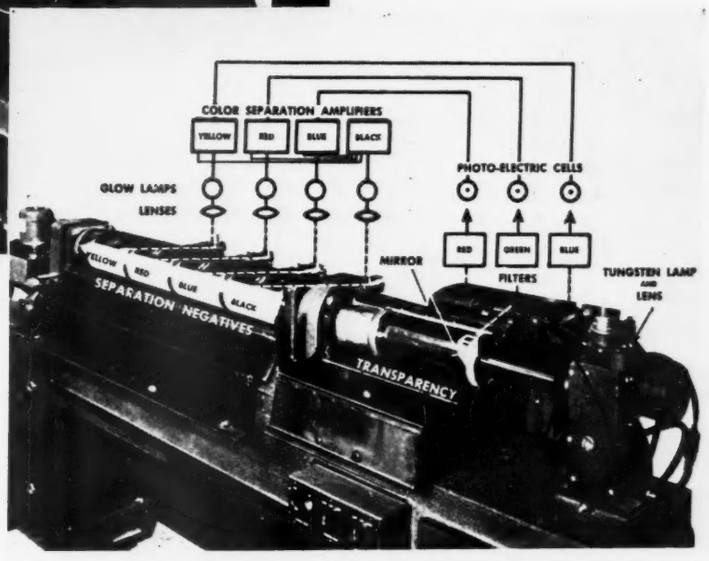
Specifications of the 185 T. Platemaster: height, 57 in.; width, 46 in.; depth, 57½ in.; platen size, 24 in. by 24 in. by 2 in. or 26 in. by 30 in. by 2 in.; daylight opening, 4 in.; ram, 20 in. diam. cast meehanite, and weight, 9000 lbs.

Representatives of the Williamson organization to be on hand at the exhibit will include Eugene Williamson, President, George P. Walker, Sales Manager, W. S. Piggins, N. Kosh, H. B. Vreeland and W. K. Anderson.



The 185 T. Platemaster molding press to be exhibited by Williamson and Co., Inc., at Display Space No. 374. Press is designed for molding plastic plates, rubber plates and Vinylite electrotype molds.





At upper left is shown a general view of Time, Inc.'s Color Scanning Machine which was developed jointly by Eastman Kodak Co. and Time Inc.'s Springdale (Conn.) Laboratory. The instrument is employed for making color corrected, continuous-tone three-color and black separation negatives from color transparent copy. Electronics, optics and photography are employed in operation of the machine.

The Color Scanner is a lathe-like machine—that is a shaft extends from end to end of the machine. Upon the right end is mounted a transparent drum. The color transparency is wrapped around this transparent drum. At the left part of the machine four sheets of sensitized photographic film are wrapped—one each for yellow, red, blue and black, in that order. A spot of light projected from a lamp scans the color transparency wrapped on the transparent drum at the right of the rotating shaft. The light spot beams a varying color pattern by mirror through three filters. These filters separate the color values and by means of photo-electric cells, pass them on to the electronic and amplifying panels, shown in upper left illustration. In turn, the color values (varying currents) are sent to the four lamps which expose the four revolving sensitized negatives on the drum at the left side of the shaft.

In operation, the drums are advanced along the axis of the shaft. This includes the color transparency on the transparent drum section at the right and the drum section carrying the unexposed color separation films. The action is similar in principle to a screw-cutting lathe. The scanning operation is said to require 1 hr. 5 min. for an 8 in. by 10 in. color transparency at 250 lines to the inch.

Time Makes Announcements

TIME, Inc. recently made two important announcements. One of these is organization of a new subsidiary of Time, Inc., named Printing Developments, Inc. Announcement was made by Charles L. Stillman, Executive Vice President.

Mr. Stillman said the primary function of the new corporation would be the commercial application of new machinery and processes developed in Time, Inc.'s Springdale (Conn.) laboratories.

Among the first of the subsidiary's activities will be the leasing of the recently announced electronic color scanner and licensing of the Springdale-developed Lithure offset printing plate process.

Printing Developments, Inc., will have its offices at Time & Life Bldg., Rockefeller Plaza, New York 20, N. Y.

The other announcement made by Time, Inc., previous to forming of its new subsidiary Printing Developments, Inc., was related to a new electronic scanner. The scanner was developed jointly by Eastman Kodak Co. and Time, Inc.'s Springdale (Conn.) laboratory. The announcement was made by Andrew Heiskell, Publisher of *Life* magazine. A number of full page color illustrations reproduced by the scanner have been printed in *Life* recently.

Heiskell said: "The scanner is an electronic device which produces separation negatives of remarkably high quality. In use, an electronic computing device measures the color values in a four-color transparency and produces separations which are very close to being in perfect color balance.

"Under development for four years, the scanning process has now passed out of the laboratory stage and is being used by *Life* in regular production schedules," Heiskell said. "While it is in a sense still in an experimental stage with *Life*, because it requires editors to use special methods in preparing four-color copy, we are setting up a special demonstration of the process at 270 Park Ave., New York, and at 330 East 22nd St., Chicago to permit printers and engravers to study its application to specific color reproduction problems."

Robertson Moves

The R. R. Robertson Co. has announced a new location for its manufacturing plant, general offices, sales display room and engineering department. The firm is now located at 3067-79 Elston Ave., Chicago. The latest move brings together all manufacturing facilities which Robertson formerly conducted in various locations.

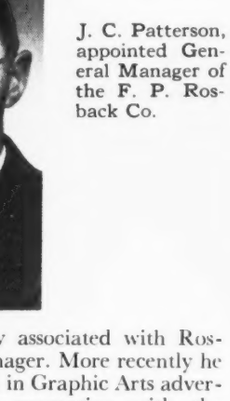
Pearce Distributor

It has been announced that Orville Dutro & Son, Inc., has been named as the agency for the sale and distribution of the Pearce Multi-Converter press. It is stated that the press will print, imprint, number, perforate both ways, punch any shape of hole, punch-patch and eyelet, corner-cut, die-cut, score and cut to sheets in singles, gangs or rewinds, in a single continuous operation.

EXECUTIVE Cs

The appointments of J. C. Patterson as General Manager and F. C. Roosevelt as Sales Manager of the F. P. Rosback Co., has been announced by Walter W. Rosback, President of the firm. Mr. Patterson was formerly associated with Rosback as sales manager. More recently he has been engaged in Graphic Arts advertising and sales promotion with the Meermans, Inc., advertising agency of Cleveland, O. He rejoins the Rosback organization on August 1st. Mr. Roosevelt has been associated with Rosback for more than 30 years. In his new position, he will be in charge of all sales and sales promotion activities for the company.

J. C. Patterson, appointed General Manager of the F. P. Rosback Co.



Dr. Andries Voet, Director of Research of the Ink Div. of the J. M. Huber Corp., has been in Rehovoth, Israel, at the invitation of the Israeli government, to consult on a special technological research problem concerning new industrial developments in that country. While traveling to and from Israel, Dr. Voet stopped in Holland, Germany, Rome, Athens, Switzerland, Belgium, England and Scotland. While in England, he spoke to the Printing, Packaging and Allied Trades Assoc., official British government sponsored Graphic Arts research organization.

Craig Spicher, Printing Research Director of Miehle Printing Press & Mfg. Co., led a panel discussion on the science of judging halftone printing at the June meeting of the Graphiles of Chicago. Mr. Spicher exhibited some examples of common faults of halftone printing as well as samples of fine halftone printing.

Charles A. Harwood, appointed to the sales force of Miehle Printing Press and Mfg. Co., according to an announcement by Carlton Mellick, Vice President in Charge of Sales. Mr. Harwood formerly was associated with Printing Machinery Div., Electric Boat Co., as midwest manager.

Lewis L. Spangler, appointed Sales Manager for Collmar Corporation, according to an announcement by Laurance C. Martin, President. Mr. Spangler was recently associated with Continental Can Co. as manager of industrial relations.

John Stungis, jr., Mechanical Engineer, recently added to the staff of the Lanston Monotype Machine Co., according to an announcement by A. E. Giegengack, Executive Vice President. Mr. Stungis is a graduate of Ohio State University, son-in-law of J. Homer Winkler, Technical Advisor, Battelle Memorial Institute, Columbus, O.

Howard J. Soriano, appointed to the newly created position of Eastern Sales Manager, Sinclair & Valentine Co., according to an announcement by Arthur J. Mahnken, Vice President in Charge of Sales.

Appointment of Paul Babcock as Sales Manager and C. D. Proctor as Sales Supervisor of The Challenge Machinery Co., has been announced by J. Edgar Lee, President. B. S. Hanson will continue as Sales Manager.

James G. Willis, appointed Pacific District Manager for Harris-Seybold Co., according to an announcement by Ren R. Perry, General Sales Manager. Mr. Willis has served as Midwestern branch manager at St. Louis for the past year.

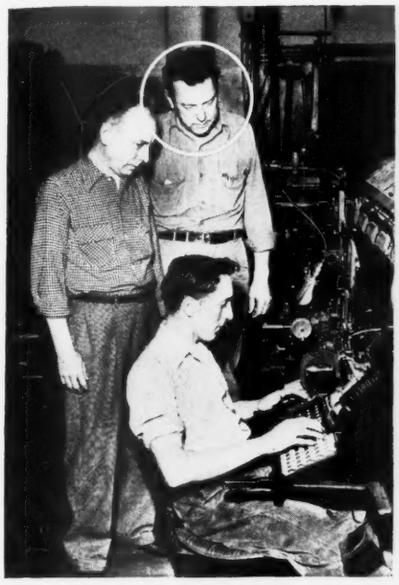
H. T. Simpson, President of The Printing Machinery Co., who was honored recently on his 25th anniversary as president of the company. A luncheon was given by the board of directors of the firm in Mr. Simpson's honor. He has been associated with the company for 35 years.

Malcolm O. Brewer, appointed to sales staff, Miehle Printing Press and Mfg. Co., according to announcement by Carlton Mellick, Vice President in Charge of Sales. Mr. Brewer will work out of the New York office in the Sheet-Fed Rotary Letterpress Sales Div. He formerly was associated with the Printing Machinery Div., Electric Boat Co.

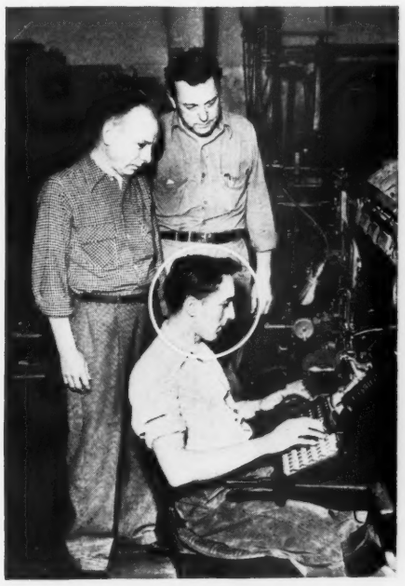
Robert M. O'Connor has resigned as Plant Manager of the Warren (O.) *Tribune-Chronicle*, and has purchased a rotary printing plant in Los Angeles, Calif. He has been associated with the Warren newspaper for 23 years.

Franklin Moss, President of Mosstype Corporation, has announced the appointments of John E. Lecraw as Plant Supt. and Jack Gerard as Production Manager of the company. Mr. Lecraw formerly was production manager, and Mr. Gerard his assistant.

They're all talking about it...



Roland Weiss, Foreman:
"Our deadline headaches are over now, boys. With this new Model 33 Linotype, we're even taking Thursday's heavy grocery advertising in stride. Sometimes I wonder how you do it, Harley."



Harley Maxwell, Operator:
"No trick at all, Roland. With the 33's One-Turn Shift, I pick my magazine in a second, and keyboard text or display—fast. No counting quads, either—I just flip the Self-Quadder handle. No trouble at all."

Don Boatman, Head Machinist:
"No trouble is right, Harley. This new Linotype has certainly not taken much of my time. Its easy-to-get-at parts—like the Swinging Keyboard—make a big difference during the little time I do spend on it."

... and William D. McNaughton, Assistant Publisher, Pekin Daily Times, Pekin, Illinois adds:

"Since we installed the Model 33 Linotype in March, 1949, we've stepped up our production a lot. Just look at the record: During the week of May 3rd, 1948, *before* we bought the 33, we published 78 pages; during the week of May 3rd, 1950, we published 96 pages!

"For one thing, we cut hand composition of display about 80%. For another, we got a big plus in *versatility* with the Model 33. We use it primarily to set advertising display and text—8 point to 36 point—and it does both with equal speed. But when we need it, we can also use it to set news heads and body matter. The 33 has got us in under deadline many a time when volume was heavy!"

Talk over with us what the new Linotype can do to improve the job, and finish it in less time. Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, New York.

LINOTYPE
TRADE MARK
Caslon Old Face, Caledonia Bold and Caledonia

THE PADUCAH SUN-DEMOCRAT

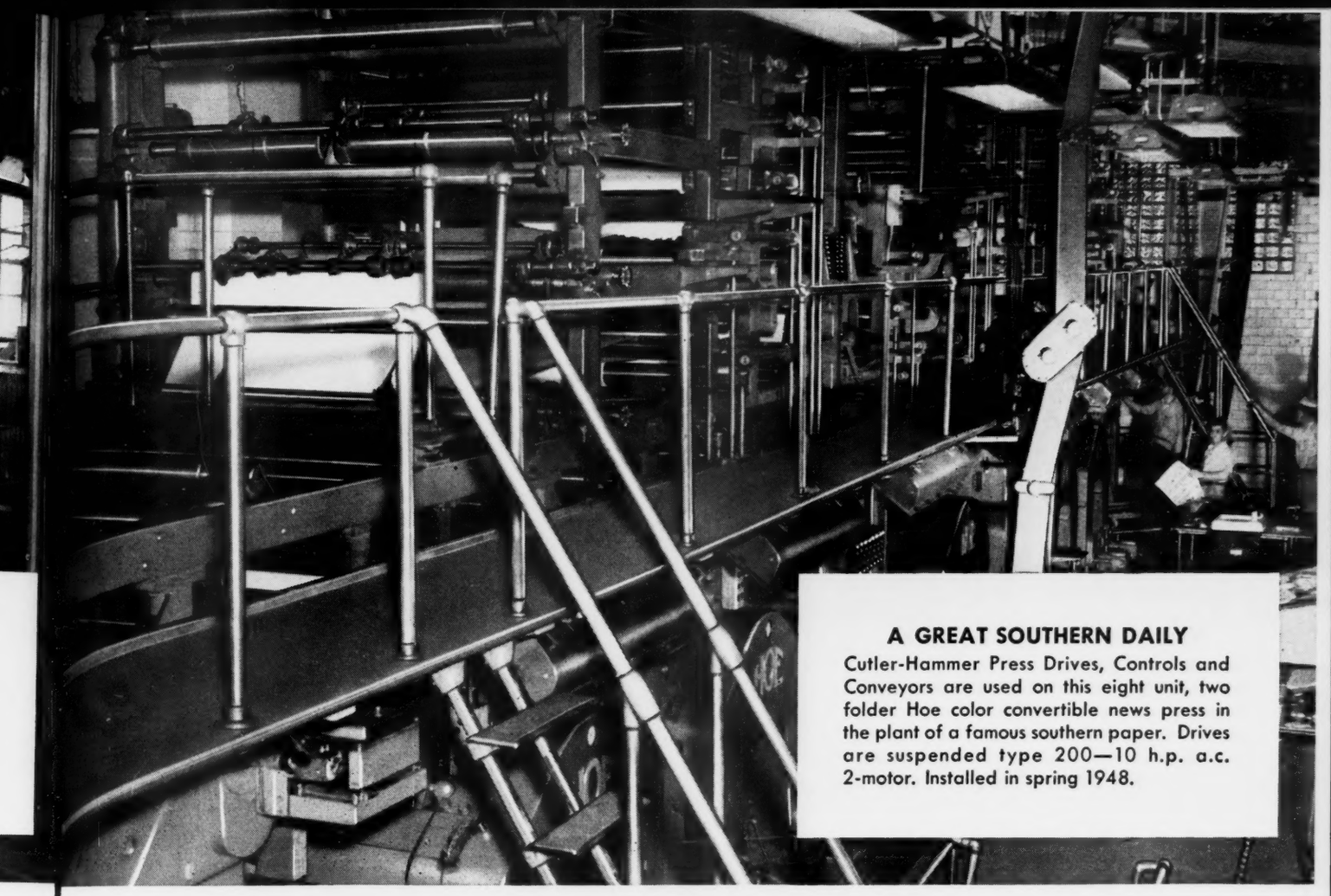
A daily and Sunday paper with a circulation around 23,000 in Paducah, Ky., is printed on this press equipped with Cutler-Hammer Press Drive and Control.

WHAT ANY PUBLISHER MUST HAVE...

CUTLER-HAMMER OFFERS IN SUPERLATIVE DEGREE

The reason why more publishers have preferred Cutler-Hammer Press Drives to any other drive is because they recognize that Cutler-Hammer Press Drives provide in superlative degree the dependability of performance and simplicity of operation they *must* have. Yet these press drives are made up of familiar and tested components, rugged, easy to understand. These drives cost less initially, are more economical to install and operate, they provide the best efficiency of any at today's operating speeds. The new multi-step drum type control represents a great improvement over previous types. It provides 90 stable speed points, brings press up to printing speeds in mere seconds. The new control and the magnetic clutch used in the assembly establish a smoothness of starting and acceleration unequalled elsewhere. The magnetic clutch results in improved jogging and better control of plate cylinder positioning. The improvement of this press drive has rendered needless many elements which elsewhere merely lead to confusion, trouble, wasted power, excessive wear, loss of production. Other features such as in-line mounting and factory assembled control cubicles provide space and installation economies. Where more floor space is needed, overhead suspension drive mounting is available. Yes, here, and in other C-H printing press drive features, you too will find what you need in extra degree. CUTLER-HAMMER, Inc., 1460 St. Paul Avenue, Milwaukee 1, Wisconsin.

CUTLER-HAMMER
PRESS DRIVES
C-H



A GREAT SOUTHERN DAILY

Cutler-Hammer Press Drives, Controls and Conveyors are used on this eight unit, two folder Hoe color convertible news press in the plant of a famous southern paper. Drives are suspended type 200—10 h.p. a.c. 2-motor. Installed in spring 1948.

MONTREAL "THE STANDARD" COLOR AND GRAVURE TABLOID

"The Standard," a Canadian week-end newspaper with more than 300,000 circulation, prints both color magazine and rotogravure sections on this Goss press which employs a Cutler-Hammer Press Drive and Control.

Cutler-Hammer Web Break Detectors

Stop press *instantly* if web breaks. Scientifically designed to eliminate bouncing and chattering on web. Web can be rethreaded without latching detectors. Easy to mount.

Cutler-Hammer Web Severing Device

A Cutler-Hammer "original" that has resulted in greater total savings than any other single accessory. It instantly slashes broken web close to impression and guards against destructive wrap-arounds and costly delays.

Conference Dates *(with organization names and principal officers)*

American Photoengravers Association — 1950 Convention to be held at Chalfonte-Haddon Hall Hotels, Atlantic City, N. J., October 9, 10 and 11. W. K. James, President; Frank J. Schreiber, Executive Secretary, 166 W. Van Buren St., Chicago 4, Ill.

ANPA Mechanical Conference—1951 Conference, Edgewater Beach Hotel, Chicago, June 11, 12 and 13. Chairman of the Committee, Edwin H. Evers, Production Manager, St. Louis *Globe-Democrat*. Manager ANPA Mechanical Dept., Vernon R. Spitaleri, 370 Lexington Ave., New York 17, N. Y.

Fifth District Craftsmen's Conference — Secretary-Treasurer, John Fisher, Superintendent, Reardon-Parshall Co., 466 Larned St., N.W., Detroit, Mich.

Great Lakes Newspaper Mechanical Conference—1951 Conference, Hotel Oliver, South Bend, Ind., January 7, 8 and 9. President, LeRoy Coates, Pressroom Supt., Grand Rapids (Mich.) *Press;* Secretary, Al. P. Oberg, Flint (Mich.) *Journal;* Chairman, Mfrs. and Suppliers Committee, Clay Wellman, Ludlow Typograph Co., 2032 Clybourn Ave., Chicago 14, Ill; Local Arrangements Chairman, Royal H. Rager, South Bend (Ind.) *Tribune*.

Illinois Newspaper Mechanical Conference—1950 Conference, Hotel Louis Joliet, Joliet Ill., September 23 and 24. President Arthur Kramer, Joliet (Ill.) *Herald-News;* Secretary-Treasurer, William L. Augspurger, Peoria (Ill.) Newspapers, Inc.

Intl. Assoc. Electrotypers & Stereotypers — 1950 convention to be held aboard the ship Queen of Bermuda and the closing session ashore at the Princess Hotel, Bermuda. Ship departs from New York, N. Y., Saturday, October 28, 3 p.m. Return trip, boat docks in Bermuda on Friday, November 3 at 9 a.m. A. P. Schloegel, Executive Secretary, 701 Leader Bldg., Cleveland 14, Ohio.

International Association of Printing House Craftsmen—1950 Convention to be held at Hotel Stevens, Chicago, September 10, 11, 12 and 13. President, Russell J. Hogan, Wilson H. Lee Co., Orange, Conn.; Executive Secretary, Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, Ohio.

International Typographic Composition Association—1950 convention, Chicago, Hotel Sheraton, Sept. 14, 15 and 16. President, Frederick H. Lutz, Lutz Composition, 93 Centre St., Brockton 35, Mass.; Frank M. Sherman, Executive Director, 1015 Chestnut St., Philadelphia 7, Pa.

Iowa Daily Newspaper Mechanical Conference — 1951 Conference, Hotel Montrose, Cedar Rapids, Iowa, May 5, 6 and 7. Secretary-Treasurer, Paul F. Kamler, Mechanical Supt., Clinton, (Ia.) *Herald*.

Kansas Newspaper Mechanical Conference — 1950 Conference to be held at Kansan Hotel, Topeka, Kan., September 30 and October 1. President, G. M. Harris, Salina (Kan.) *Journal;* Secretary-Treasurer, Larry Miller, 701 Jackson St., Topeka, Kan.

Lithographers National Association — 1950 Convention to be held at Edgewater Beach Hotel, Chicago, September 7, 8 and 9. President, Randolph T. Ode, President, The Providence Lithograph Co., Providence, R. I.; Executive Director, W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

Missouri Newspaper Mechanical Conference — 1950 Conference, Claridge Hotel, St. Louis, Mo., September 8, 9 and 10. President, Otto Enlow, Photoengraving Dept., Joplin (Mo.) *Globe;* Secretary-Treasurer, O. K. Hammitt, Mechanical Supt., Moberly (Mo.) *Monitor-Index*.

National Association of Litho Clubs — Executive Secretary, William J. O'Holleran, Assistant Supt., Myercord Co., 5339 W. Lake St., Chicago 44, Ill.

National Association of Photo-Lithographers — 1950 Convention to be held at The Shoreham, Washington, D. C., October 25, 26, 27 and 28. Executive Vice President, Walter E. Soderstrom, 317 West 45th St., New York 19, N. Y.; Executive Secretary, William J. Stevens, 317 West 45th St., New York 19, N. Y.

National Graphic Arts Education Association — 1950 convention, Chicago, Sherman Hotel, Sept. 21, 22 and 23. John G. Henderson, President; Fred J. Hartman, Educational Director, 719 Fifteenth St., N. W., Washington 5, D. C.

National Graphic Arts Exposition—International Amphitheatre, Chicago, September 11 to September 23, 1950. Headquarters for National Graphic Arts Exposition, Inc., at Room 802, 105 W. Monroe St., Chicago. President, A. E. Giegengack; Asst. to President, Russell H. Herrell; Secretary, S. Frank Beatty, Graphic Arts Assoc. of Illinois, Chicago. Exposition hall closed on Sunday, Sept. 17. Open all other days from 1 p.m. to 10 p.m.

National Printing Equipment Association, Inc. — Palmer House, Chicago, September 20, 1950. Directors meeting, 10 a.m.; meeting of members, 2 p.m. President, R. Verne Mitchell, Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O.; James E. Bennet, Secretary, 140 Nassau St., New York 7, N. Y.

New England Mechanical Conference — 1950 Conference to be held at Hotel Statler, Boston, October 28 and 29. President, Arthur M. Kohler, Production Mgr., Waltham (Mass.) *News-Tribune;* Secretary-Treasurer, Walter C. Crighton, Comp. Room Supt., New London (Conn.) *Day*.

Northwest Mechanical Conference — 1951 Conference, Radisson Hotel, Minneapolis, Minn., February 10, 11 and 12. President, Vernon G. Eck, Dunwoody Industrial Institute, Minneapolis, Minn.; Secretary-Treasurer, Ralph Carson, Dunwoody Industrial Institute, Minneapolis, Minn.

Pacific Mechanical Conference —1951 Conference tentatively set for Biltmore Hotel, Los Angeles, during May. President, L. M. Richardson, Mechanical Supt., Los Angeles *Herald-Express;* Secretary for the North, Edw. N. Conley, color press foreman, San Francisco *Chronicle;* Secretary for the South, Fred J. Moyer, Los Angeles *Daily News*.

Pacific Society of Printing House Craftsmen—Multnomah Hotel, Portland, Ore., July 21-22. Rudolph Ernst, President, 3664 S. E. Center St., Portland 2, Ore.; Secy.-Treas., C. B. Park, 102 N. W. 9th Ave., Portland, Ore.

PNPA-NJPA Joint Mechanical Conference—1951 Conference, Abraham Lincoln Hotel, Reading, Pa., April 6 and 7. Conference director, Theodore A. Serrill, PNPA Manager, Telegraph Bldg., Harrisburg, Pa.

Printing Industry of America — 1950 convention, Chicago, Palmer House, Sept. 17, 18, 19 and 20. James R. Brackett, General Manager, 719 Fifteenth St. N. W., Washington, D. C.

Research and Engineering Council *of the Graphic Arts Industry, Inc.*—President, Frank F. Pfeiffer, Reynolds & Reynolds Co., 800 Germantown Ave., Dayton, O.; Official Headquarters, Bernard Taymans, 719 Fifteenth St., N. W., Washington 5, D. C.

SNPA (Eastern Div.) Mechanical Conference — 1950 Conference, Tutwiler Hotel, Birmingham, Ala., August 28 and 29. Chairman, L. H. Pickens, Mechanical Supt., Greenville (S. C.) *News-Piedmont;* Secretary, Tom Tanner, c/o SNPA, P.O. Box 1569, Chattanooga 1, Tenn.

SNPA (Western Div.) Mechanical Conference—Secretary, C. W. Tabb, 621 Texas Bank Bldg., Dallas, Tex.; Chairman, Manufacturers' and Suppliers' Committee, William Sefton, c/o Howard Flint Ink Co., 1010 Lockwood Dr., Houston 20, Tex.

Technical Association of the Lithographic Industry — (TALI)—President, Michael H. Bruno, Lithographic Technical Foundation, Glessner House, 1800 So. Prairie Ave., Chicago 16, Ill. Secretary-Treasurer, Geo. W. Wilhelm, 814 N. East Ave., Oak Park, Ill.

Patents

For The GRAPHIC ARTS

Covering patents issued April 4, April 11, April 18 and April 25.

Binding, Cutting, Perforation

2,503,112. PADDING RACK is for holding a stack of sheets during the glueing operation. It consists of a pair of compression plates for receiving the stack of shets between them. One plate pivotally carries tension coil springs; the other has slots in the side edges. Keeper openings bisect the slots. Rigid straps which are carried by the springs are adapted to snugly fit in the slots. The straps have a series of adjustment openings therein for selective alignment with the keeper openings. Keeper pins are loosely carried by the plate having the slots and keeper openings. The pins are removably fitted in the keeper openings for engaging selected openings in the straps. Invented by Frederick J. Holtz, Milwaukee, Wis. Unassigned. Application December 13, 1947. 1 claim.

2,503,984. THE TIPPING OR PASTING MACHINE is for the application of paste to paper sheets, plates, or folded signatures and is especially adapted for book binding. It comprises a chain conveying a series of sheets through the machine while supported upon their lower edges and a rotary disc with a periphery for the application of strips of paste to successive sheets. The pasting disc is driven at a surface speed less than the speed of movement of the chain and of the sheets through the machine. There are rollers for receiving and delivering the sheets. Invented by Emil Wuko, New York, N. Y. Assigned to H. Wolff Book Mfg. Co., Inc., New York, N. Y. Application May 7, 1948. 18 claims.

2,504,071. MACHINE FOR SCRAPING AND BURNISHING THE EDGES OF BOOKS comprises a pneumatic clamp for a plurality of books and a support therefor. The clamp is rotatably mounted in the support to position any of the three edge surfaces of the books for treatment. A frame is secured to the support and a carriage is slidably engaged with the frame. Carriage is reciprocated by means carried on the frame. There is a cross slide engaged with the carriage which is shiftable. A tool is mounted on the cross slide and disposed for working on the edges of the books in the clamp. Invented by John H. Esak, Camden, N. J. Assigned to Haddon Bindery, Inc., Camden, N. J. Application January 30, 1948. 5 claims.

2,505,713. BOOKBINDER is for use in binding pamphlets, books, catalogs and the like. The front and back covers and the back of the binder are made of a single piece of sheet material, such as cardboard, with a novel type of hinge that eliminates looseness and play along lines of the juncture of the front and back covers and the back of the binder. Hinge comprises a line of closely spaced holes along the lines of juncture. A reinforcing plate of cardboard is placed on each side of the back between the rows of holes. Plates are of a size not to interfere with the hinge. Invented by Joseph P. Rose, Saugerties, N. Y. Assigned to F. L. Russell Corp., Saugerties, N. Y. Application May 14, 1947. 3 claims.

Composing Room Equipment

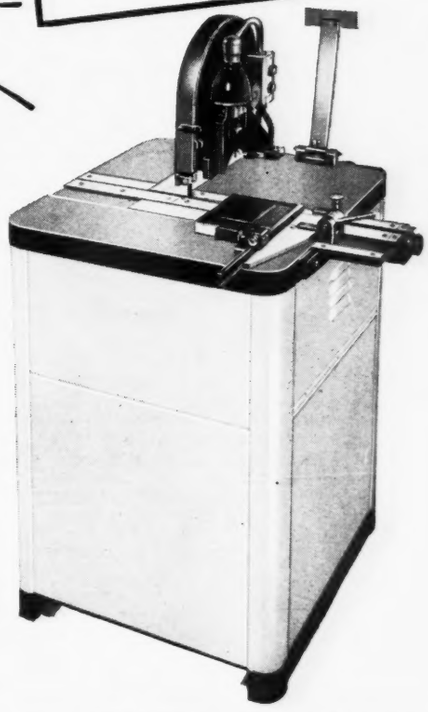
2,503,182. LINE-PRINTING TYPEWRITER is for use principally in connection with the photo-offset printing industry. The machine has removably and interchangeably mounted therein type magazine means, subdivided into individual type channel means each having a continuous circuitous path therein in which a multiplicity of type bars of like type faces are secured. The need for complex assorting mechanism such as in Linotype or like machines is said to be eliminated. The copy produced is in a form which lends itself to photographic processes for master production plate printing, which in turn may be used directly for reproduction purposes. Invented by Robert F. Wheeler, Chicago, Ill. Unassigned. Application August 30, 1948. 48 claims.

2,503,647. PHOTOTYPOGRAPHIC COMPOSING MACHINE. The keyboard is carried by a negative carrier and posi-

All new patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issued each week. Printing Equipment Engineer is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

NEW

Rouse



TIME-SAVING

Plate Saw

With Exclusive Automatic Feed!

For Photoengravers, Stereotypers, Printers . . .

COMPLETELY ELIMINATES ALL squaring up, guesswork alignment, tacking, scoring, beveling, trimming, removing burrs, and use of wedges. All edges are finished smooth. You make only four quick, easy, automatic saw cuts and the plate is ready for the printer.

Perfectly squared, smooth, uniform cut assured by *exclusive* Automatic Feed. Cuts up to 15" of type high work in only 17 seconds!

Cuts to Picas, Points and Quarter Points as well as to Inches—exactly as the printer wants!

Outside Mortising effectively done to pica and point measurement.

Equally effective on copper, zinc, or plastic plates, whether wood or plastic mounted or shellcast.

Saw blades hold a sharp edge for 30-40 hours of continuous operation . . . can be changed in just 1 minute! New blades cost only $1.50 each in lots of six.

Soon pays for itself by saving considerable expensive time. Occupies only 26" x 26" space.

DESIGNED BY MEN WITH 23 YEARS KNOW-HOW IN BUILDING BAND SAWS FOR PRINTERS!

Write for complete details TODAY!

H. B. ROUSE & COMPANY
2214 North Wayne Avenue, Chicago 14, Illinois

ROUSE PRODUCTS . . . The Standard of the World Since 1899

R. Hoe & Co. Metal Lithographic Press

A PRINTING press for multi-color lithographing of 55 gal. steel shipping drums has been announced by R. Hoe & Co., Inc. The first press has been installed in the Rheem Mfg. Co.'s New Orleans plant for decorating steel containers.

The lithographic press prints, individually, any number of colors on 50 in. by 72 in. sheets of 18 ga. steel which are formed into 55 gal. drums. The 18 ga. steel sheets are approx. $1/20$ in. thick

Rheem Presents
THE FIRST COMPLETELY LITHOGRAPHED AND INNER ROLLER COATED 55 GALLON STEEL DRUM
FROM THE WORLD'S LARGEST METAL DECORATING PRESS
Rheem
R
RHEEM MANUFACTURING COMPANY

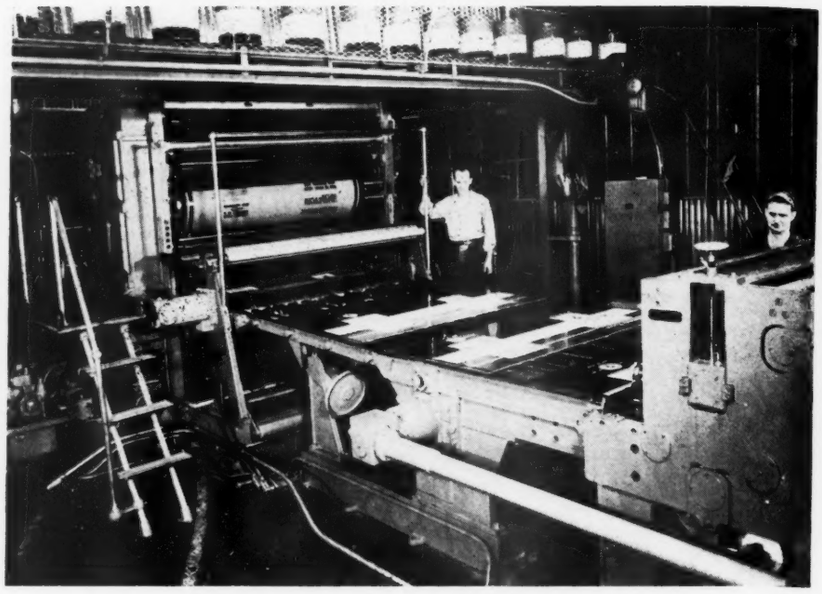
C. W. Dickinson of R. Hoe & Co., Inc., shows what is claimed to be the world's first completely lithographed and inner roller coated 55 gal. steel drum. The steel sheet was printed in three colors on a Hoe press in the Rheem Mfg. Co.'s New Orleans plant.

and weigh approx. 2 lbs. per sq. ft. Maximum and minimum sheet size for the Hoe press is 50 in. by 72 in. and 24 in. by 42 in., respectively. Gauge range of the sheets which can be handled, extends from 24 ga. up to 16 ga.

Speed of the press is 4200 sheets per hr. In addition to the printing on the outside of the drum, the press handles the head or top of the container in the same manner.

Along with the development of the special multi-color metal lithograph presses, Rheem uses an electric resistance welder which forms and welds the flat lithographed steel sheets into drums without marring or burning the surface.

Another part of the Rheemcote process is a method of coating drum interiors with linings, permitting bulk shipment of corrosive fluids and foods. The linings are controllable in thickness to within 0.001 in., and are roller-coated on flat steel sheets before the drums are formed.



Multi-color lithographic press announced by R. Hoe & Co., Inc., for lithographing 55 gal. steel drums. The press accommodates 18 ga. steel sheets measuring up to 50 in. by 72 in. and prints at 4200 sheets per hr.

(Continued from page 53)

tioning of the carriage for printing a selected character is accomplished solev through manipulation of the selected key. Automatic spacing of the characters is accomplished in accordance with their widths. This is brought about by electromagnets and electrical leads, each lead being adapted to effect operation of a different electromagnet of the variable spacer. A multiple switch universally diverts each lead to effect a greater unitary spacing or to divert each lead to effect a lesser unitary spacing. Invented by Homer W. Young, Ilion, N. Y. Unassigned. Application May 2, 1947. 2 claims.

2,504,527. CARRIER FOR PHOTOGRAPHIC ROLL FILMS FOR CAMERAS is adapted for use in the phototextype composing machine camera of Huebner's U. S. patent 2,180,417, and also in photo mechanical cameras and commercial reproduction cameras in general. The roll film carrier is in the form of a portable unit which is adapted to be transported from a dark room and readily placed in operative position in and removed as a unit from cameras of various types. In this way the camera is not tied up, as is the case where roll film carriers are built into cameras as part of the camera mechanism. By use of two roll film carriers, one may be loaded while the other is being used in the camera, so that greater production is achieved. Each unit includes mechanism for maintaining successive portions of the supported film in exposure position in the camera, and a light-excluding housing. Invented by William C. Huebner, New York, N. Y. Unassigned. Application April 12, 1947. 10 claims.

2,504,745. TYPOGRAPHICAL MACHINE HAVING HOLDING MEANS FOR CHARACTER VIEWING. The improvements are especially useful with machines constructed to produce lines of type matter photographically on sensitized film or paper instead of casting lines of type. Such machines are shown in patents 2,395,659; 2,391,021 and 2,042,041. In the present invention a "used" line of character-bearing elements or matrices after their characters have been produced, is presented and held at a station intermediate of the reproducing and distributing stations on the machine. At this station either the characters or suitable reference letters provided on the elements and indicative of the characters borne thereby are visible to the operator for reading and identification purposes. Invented by Fritz Stadelmann, Valley Stream, N. Y. Assigned to Intertype Corporation, Brooklyn, N. Y. Application March 11, 1949. 25 claims.

2,505,285. KNIFE WIPER FOR TYPOGRAPHICAL SLUG CASTING MACHINES. The stroke of the knife wiper may be kept constant or uniform regardless of the level at which the elevator is arrested. Connections between the knife wiper and elevator include a multiplying cam element operative during the downward movement of the elevator to complete the active stroke of the wiper when the elevator is arrested at either of the two upper casting levels, and which is also movable automatically to a neutral position when the elevator is allowed to descend to its normal or lowermost casting level in order that a stroke greater than that required will not be imparted to the wiper. In a preferred embodiment the cam element is rotatably mounted on the elevator and controlled by a fixed upright banking member located below the cam element and adapted to turn it one or another of three different angular positions according to the level at which the elevator is arrested. Invented by Frank C. Frolander, Elizabeth, N. J. Assigned to Mergenthaler Linotype Co., Brooklyn, N. Y. Application February 16, 1945. 4 claims.

Feeding, Folding Delivery

2,502,688. WEB SUPPLYING MECHANISM is used with high speed rotary

Style KP has Power Inker
Style KA has Automatic Inker

IT'S A CHALLENGE®

It's the new Series K. And that's another way of saying ***clean, sharp, uniform proofs every time.***

The new Challenge Series K Proof Presses are all cylinder press design with the cylinder revolving while the reciprocating bed rides on anti-friction rollers. All three models are equipped with cylinder grippers and micrometer side guides, a foot trip to prevent offset on the cylinder packing during the return stroke, and a sliding feed board to give easy access to the cylinder packing. Two sizes in each style.

Get complete details today!

EXHIBITOR GRAPHIC ARTS EXPOSITION 50 CHICAGO SEPTEMBER 11-22 1950

Style KE has 20" Ink Distributor

Style K has Ink Plate

613

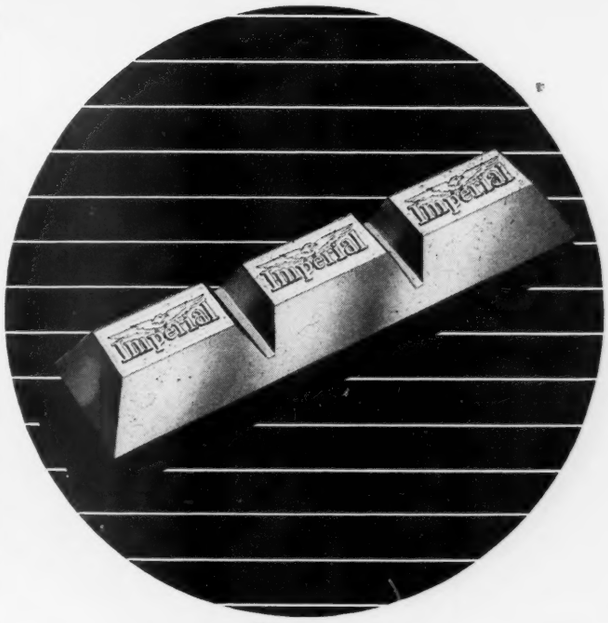
THE CHALLENGE MACHINERY COMPANY

GRAND HAVEN, MICHIGAN

Challenge Reg. U. S. Pat. Off.

Over 50 Years in Service of the Graphic Arts

DEALERS IN ALL PRINCIPAL CITIES



Imperial 4-Way Service Insures Your Complete Satisfaction

Beyond providing the finest type metals possible to produce, Imperial first originated, and continues to provide for Imperial users, these additional essential services to insure satisfactory metal performance:

1. **Periodic Analyses** plus detailed laboratory reports to help Imperial users maintain proper and uniform quality of their working metal supplies. (*Originated by Imperial.*)
2. **Personal counsel** and assistance from Imperial representatives who are type metal specialists and serve the graphic arts *exclusively.*
3. **Plus Metal Service.** Adjusting alloys of proper formula to restore the working metal supply to full efficiency. (*Another Imperial "first."*)
4. **Dross Drum Service.** Shipping containers supplied without charge for convenient accumulation and exchange of customer's dross for equivalent weight of adjusting metal. (*Again a "first" by Imperial.*)

Whether you buy metal by pounds or tons, the complete Imperial "Better Metal—Better Printing" Program contains something of interest for *you.* Ask the Imperial representative for all the details next time he calls.

EXHIBITOR GRAPHIC ARTS EXPOSITION 50 CHICAGO SEPTEMBER 11-22 1950

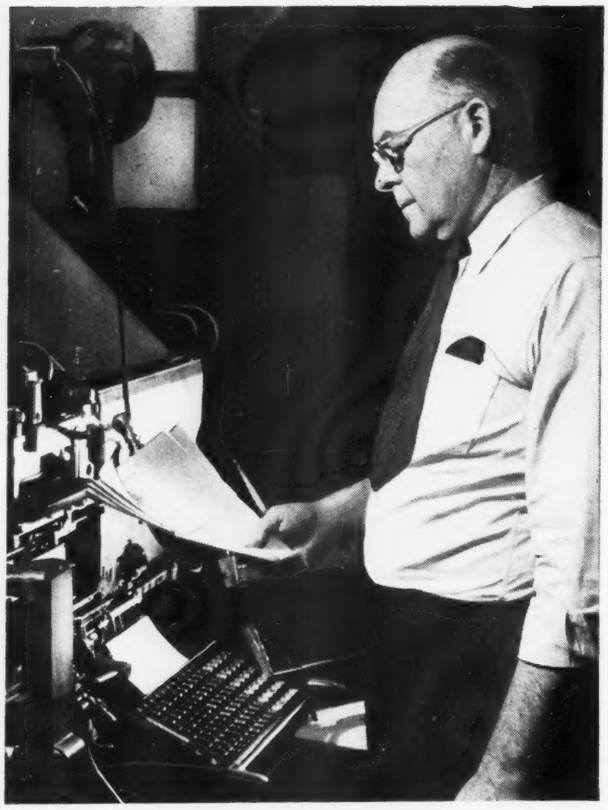
Booth No. 287

Imperial

TYPE METAL COMPANY

Serving the Graphic Arts Exclusively

PHILADELPHIA 34 · NEW YORK 7 · CHICAGO 50



"To me as an operator, Blatchford's the buy because

. . . it melts smoothly—flows freely—molds sharply—sets quickly."

No question about it, Blatchford Metal has *everything* it takes to enable your operators to do the best possible job on their machines. And there are reasons for this—three good reasons.

Reason No. 1—the lead, tin, and antimony are top quality. Metal resources and research facilities unmatched in the field assure this.

Reason No. 2—these metals are precisely proportioned. No rule of thumb in Blatchford operations!

Reason No. 3—alloying operations are under rigid control—every batch of Blatchford reflects nearly 100 years of metal-mixing know-how.

Ask your operators—your make-up men and pressmen, too—what metal best fills the bill. Chances are they'll say, "Blatchford." Try it . . . you'll see why.

Keep your metal stock always up to par—use the famous *Blatchford Metal Maintenance Service.* Write for details.

NATIONAL LEAD COMPANY, *Atlanta, Baltimore, Chicago, Cincinnati, Cleveland, Pittsburgh, St. Louis; National Lead Co. of Mass., Boston; E. W. Blatchford Co., New York; Morris P. Kirk & Son, Inc., Los Angeles; American Lead Corp., Indianapolis.*

Blatchford . . .
the NATIONAL name for dependable metal

Makers of the famous Blatchford "Honeycomb" Base

See the hollow-head stop-pin? No time wasted in changing a "Star" sleeve! A turn to the left with the special pin-wrench and off it comes!

Hexagon-shaped hole goes right through the stop-pin. Pin has one side grooved to match dovetail of wedge. When this groove is turned to align with wedge dovetail, sleeve will slip right off. Stop-pin is fixed to wedge in a manner that makes it almost impossible to fall out. Yet it can be driven out with punch, if necessary.

STAR Spacebands are made from the finest steel to be had for its purpose—are spring tempered to higher Rockwell hardness test than any other spaceband, yet through a special tempering process, we are able to make these bands ACTUALLY MORE RESILIENT . . . and they are manufactured to a degree of precision never before approached.

Six sizes available.

Now you can get an ACE Main Drive Belt equipped with *lacing*—not endless. Try one!

PRECISION
TRADE ★ MARK

LINOTYPE PARTS COMPANY
INCORPORATED
Factory and Main Office
SOUTH HACKENSACK, N. J.
Branch Office: 1327 BROADWAY, KANSAS CITY 6, MO.
CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON

SEE GRAPHIC ARTS IN ACTION

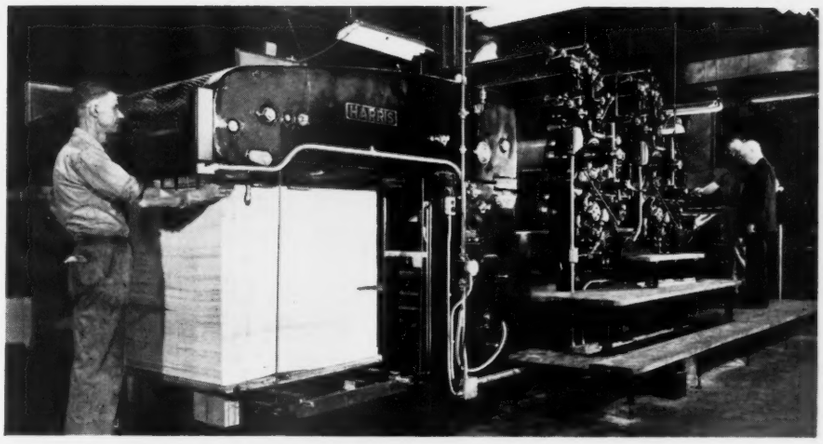
INTERNATIONAL AMPHITHEATRE
CHICAGO • SEPTEMBER 11-23
IPA INC.

SIXTH EDUCATIONAL GRAPHIC ARTS EXPOSITION

Be sure to visit Booth No. 425 and see STAR Improved Parts

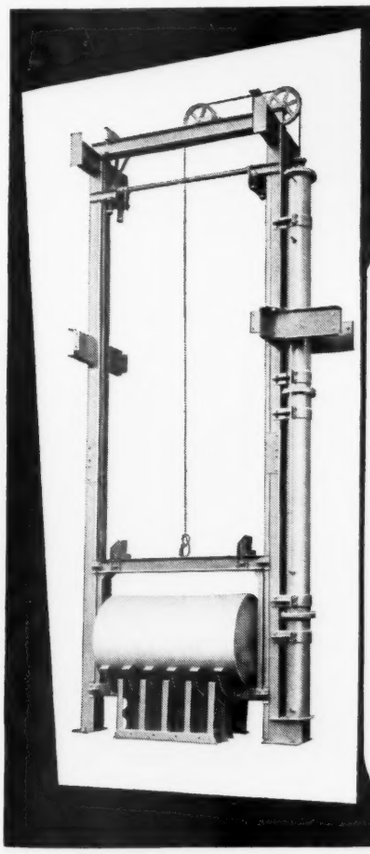
printing machines for printing newspapers and may be used with a device of the type covered by patent 2,155,430. The web supply mechanism includes a webb roll support adapted to move a replacement roll from a loading position to a splicing position, to a feeding position and to an expiring position. A first brake governed by a floating roller is held in a loop of the running web and applies braking force to the roll in feeding position. A second brake governed by a second floating roller is held in a loop of the running web and is adapted to apply a brake to roll in any position from feeding to and including the expiring position. Mechanism is provided for inactivating first floating roller and for activating second floating roller when a web splice is about to be made. Invented by William C. Wieking, Woodhaven, N. Y. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application November 22, 1944. 10 claims.

2,503,610. DELIVERY ARRANGEMENT. Folded newspapers, ready for distribution, are delivered from a printing press on belts the speeds of which may be controlled while the printing press is still in operation. This allows some leeway when fewer sheets are used in the paper and obviates the need for extra workmen to remove papers so as to prevent delivery belt from becoming clogged. A folding cylinder delivers folded sheets to a fly with which endless delivery belts cooperate to receive the folded sheets in succession. The belts are driven by the folding cylinder drive and the speeds of the belts may be varied with that of the cylinder drive by means of a shaft which is driven at a fixed speed ratio by the cylinder. A counter is also operated by a shaft and a sleeve journalled on the shaft has pulleys over which runs one end of the endless belts. Speed varying means connect the shaft and the sleeve. Invented by James L. Blackley, Battle Creek, Mich. Assigned, by mesne assignments, to Goss Printing Co., Chicago, Ill. Application September 8, 1944. 14 claims.



Harris Press Installed in Minneapolis Plant — Installation of this 42 in. by 58 in. Harris Two-color Offset Press was made recently in the Jensen Printing Co.'s plant of Minneapolis, Minn. Shown above from left to right are: Lee C. Graff and John Farley, litho pressmen at Jensen; John Ahern, Twin Cities erection supervisor for Harris-Seybold, and Chas. H. Jensen, President of the Jensen Printing Co.

2,503,858. A PAPER FOLDING MACHINE ROLL ADJUSTING MECHANISM is provided wherein conical collars carried at the two ends of each of the two co-acting rolls are maintained in contacting relation at all times. The desired adjustment of the upper and movable roll with respect to the lower roll is accomplished by axial shifting of the movable roll. A modified bearing block construction supports one end of the movable roll or two cooperating rolls. Bearing block includes a rotary element designed to effect the longitudinal shifting of the movable roll relative to the stationary roll by means of the two conical collars



Sure cure
FOR HANDLING HEADACHES

Get rid of handling headaches that come when you have to move heavy newsprint rolls from truck to press or storage room. The improved G-W pneumatic drop eases the big fellows down on smooth running loading fingers. Bruising or tearing are eliminated . . . and what's equally important, handling costs are cut way down.

ALSO AVAILABLE ELECTRICALLY OPERATED
FOR RAISING AS WELL AS LOWERING ROLLS

Gifford-Wood has specialized in materials handling for more than 136 years. As a result, G-W Engineers can recommend just the system or systems you need to pare handling costs to the bone. Whether it's mechanical handling of newsprint rolls, stereos, mail sacks, magazines . . . there's a low cost G-W Conveying System to fill the bill. To have a G-W Engineer survey your present system and make his recommendations places you under no obligation whatever. It may well be your first long step toward more economical operation. Write today.

GIFFORD-WOOD CO.
Since 1814
HUDSON • NEW YORK
NEW YORK 17, N. Y. 420 Lexington Avenue
ST. LOUIS 1, MO. Railway Exchange Building
CHICAGO 6, ILL. 565 W. Washington Street

6752

WHEN YOU THINK OF MATERIALS HANDLING . . . THINK OF GIFFORD-WOOD

carried by the two rolls, while at all times maintaing rolls parallel. Invention functions as a time-saver in adjusting rolls to form properly folded sheets. Invented by Robert J. Waterworth, Dayton, O. Unassigned. Application August 21, 1944. 8 claims.

2,504,502. PRINTING PRESS FORMER is associated with printing press folders which make the first or longitudinal fold in webs from the press. The invention features a pivotal mounting for the former near its upper edge so that angular movement may be imparted to the lower tip of the former about the pivotal axis without disturbing the spatial relation between upper edge of former and upper guide roller. This mounting is in the form of a hinge on a shaft, the axis of hinge being located to the rear and below the axis of upper roller. The construction permits angular adjustment of the former tip without changing the spatial relation between roller surface and upper edge of former. Invented by Curtis S. Crafts, Oak Park, Ill. Assigned to Goss Printing Press Co., Chicago, Ill. Application July 20, 1945. 7 claims.

Miscellaneous

During the four weeks covered by this report, no patents have been issued for this heading.

Plate Making

2,504,080. METHOD OF PRODUCING FLAT PRINTING PLATES. The outer marginal edges of an electroplate shell or ordinary matrix having relief indicia thereon are bent upwardly to form a tray This tray is placed on a flat supporting surface and a solidifiable material is introduced into the tray with its bent edges acting as the sole edge confining means for the solidifiable material. The top of the tray and the solidifiable contents are subjected to the downward pressing action of a press head of a press. The press head surface has dimensions greater than those of the tray so as to overlap and confine the entire tray. Press head is removed from contact with the tray and material therein after the material has solidified. Invented by Robert R. Myers, Jr., Des Moines, Ia. Assigned to Monomelt Co., Inc., Minneapolis, Minn. Application April 21, 1948. 3 claims.

Printing Inks

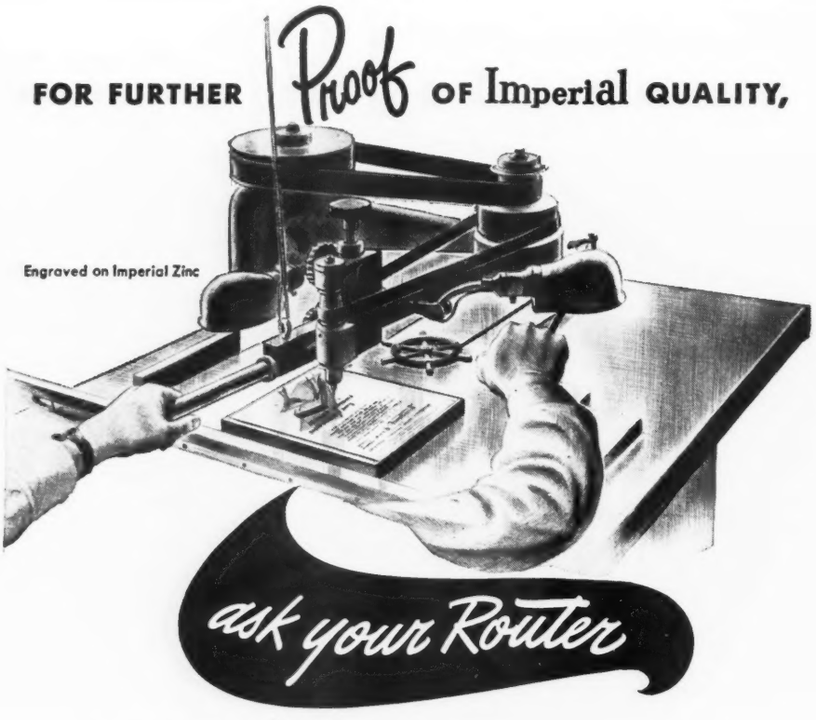
During the four weeks covered by this report, no patents have been issued for this heading.

Printing Presses and Equipment

2,502,806. SHEET FED OFFSET PRINTING MACHINE includes only rotating elements rather than reciprocating mechanisms and is capable of offset printing from a flat bed type chase. According to one aspect of the invention, successive sheets are orbitally transported on a rotating cylinder and are printed by contact with a synchronized rotating printing cylinder having resilient type thereon. Intermediate cylinders serving as offset cylinders may be used. The basic simplicity of a flat bed set up is retained while correlating with the latter both the high speed and freedom from vibration which are characteristics of rotary mechanisms. Invented by Edwin G. Staude, Minneapolis, Minn. Assigned to The Sperry Corp., New York, N. Y. Application June 9, 1945. 9 claims.

2,503,035. AUTOMATIC FEEDING APPARATUS is for platen presses and other machines with a stationary operating member for printing in four colors, etc. Impression plate is arranged on a reciprocatory swinging frame. Feeding member proper may consist of a slide movable along guides on the frame and has a clamping plate. Frame has two sets of abutments. The first set acts upon the clamping plate in order to move into and lock it in clamping position by means of a locking device at the moment the slide arrives at the initial position for the feeding during the motion of the feeding member and the printing plate away from the counter printing plate, whereas the other set of abutments acts upon a releasing mechanism for the clamping plate, when the slide during the opposite motion of printing plate toward type has effected its forward feeding of the web through a predetermined distance. Invented by Einar Marinius Eriksen, Oslo, Norway. Assigned to A/S Rull Trykk Industri, Oslo, Norway. Application August 8, 1946; in Norway January 7, 1942. 11 claims.

2,505,184. SUPPORTING ARRANGEMENT FOR PRINTING PRESS BEDS. Press includes a bed and a coacting printing cylinder. The printing press bed is movably supported in such manner that the printing pressure of the



● Routing is a very important but sometimes neglected test of zinc quality and uniformity. With its fine, uniform grain Imperial Zinc not only etches the way a good photoengraving zinc should; it also performs smoothly and easily under the router bit . . . permits working up close without danger of chipping or breaking away, or without requiring too frequent sharpening of the router bit.

Give your router a chance to test Imperial Zinc for himself! Order a case today. He too will agree, there *is* a difference.

Imperial Zinc

EXHIBITOR GRAPHIC ARTS EXPOSITION CHICAGO SEPTEMBER 11-23-1950

Booth No. 287

A Product of

IMPERIAL TYPE METAL COMPANY

SERVING THE GRAPHIC ARTS *Exclusively*

PHILADELPHIA 34 • NEW YORK 7 • CHICAGO 50

In Canada: Latimer, Limited, Toronto 2B

For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Munsey Bldg., Washington, D.C.

cylinder is uniformly distributed to the bed supports for all positions of the printing cylinder. A balancing arrangement is provided that is free from springs. A force-amplifying lever system supports the bed and vertically movable members support the lever system. Bed is movable in opposite directions along guides. The lever system comprises a pair of balancing levers disposed beneath the bed and a weight-carrying balance beam connected to one of the balancing levers. Invented by F. W. Hill, Rutherford, N. J. Assigned to Sun Chemical Corp., New York, N. Y. Application September 30, 1944. 12 claims.

2,505,495. SUPPORT FOR BED AND CYLINDER PRINTING PRESSES. The table may be applied as an attachment of or accessory to a vertical printing press of the Miehle type. The table is rectangular, may be made of wood or metal, and is of a length less than that of the printing cylinder with which it is to be used. At the rear of table two L-shaped brackets are mounted and from the leg of the brackets extending upwardly at right angles to the table surface, pins project backwardly and at an angle to be inserted into aligned openings at opposite ends of the cylinder of the press. The weight of the table will hold it in place and it may be readily lifted off when not needed by the pressman in "make-ready" operations. Invented by Irving Kantor, Brooklyn, N. Y. Unassigned. Application October 26, 1948. 4 claims.

Covering patents issued May 2, May 9, May 16, May 23 and May 30.

Binding, Cutting, Perforation

2,506,436. A CUTTING KNIFE CLAMP ADJUSTMENT is provided in a paper cutter having a vertically reciprocal clamping member that is movable by gravity for adjusting to piles of paper of different heights and is hydraulically operated for clamping. A spring mechanism is provided wherein the length of the spring may be adjusted to the various heights of the stacks of paper so that the weight of the clamp is supported by the spring. Operator adjusts upper end of spring to a level just above the upper surface of the pile so that when he permits the clamp to descend, it will come to rest on the spring just above the upper level of the pile, and the pile may then be shifted by counterbalancing means to be lined up with the clamp. Clamp is hydraulically operated when a cutting operation is to be made and clamp is pulled down against compression of spring and thereby operated as if the spring were no longer present. Spring merely determines the lower limit of free descent of the clamp. Invented by Frederick W. Seybold, Westfield, N. J. Assigned to E. P. Lawson Co., Inc., New York, N. Y. Application December 8, 1948. 5 claims.

2,506,445 SHEET CUTTING APPARATUS FOR PRINTING PRESSES. Invention deals with a mechanism disposed along the path of travel of a sheet through a printing press for cutting the sheet into two or more parts prior to delivery of the sheet from the press. A series of relatively adjustable rotary cutters are used with pneumatic means providing an air blast for moving or supporting the sheet adjacent the cutters in the operation of severing the sheet into separate parts. Invented by Henry B. Donning, New Rochelle, N. Y. Unassigned. Application August 28, 1945. 11 claims.

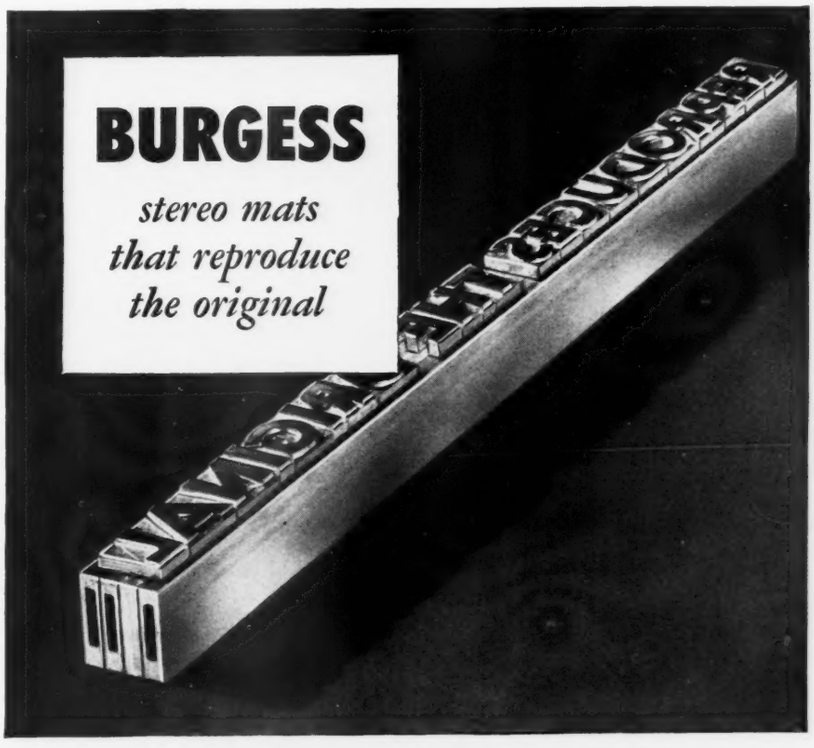
2,506,651. HYDRAULIC CLAMP FOR PAPER CUTTERS is so designed that the force multiplying hydraulic means comes into action only after the clamp has contacted the paper pile and is then operative to force the clamp tightly down on the paper pile. The climp is moved down mechanically into contact with the upper surface of the paper pile and then the force multiplying hydraulic means is brought into operation to force clamp with great pressure against the pile. Since the hydraulically operated portion of the stroke is thus relatively minute, large forces may be developed on the clamp even though the applied force is considerably smaller. Invented by Frederick W. Seybold, Westfield, N. J. Assigned to E. P. Lawson Co., Inc., New York, N. Y. Application filed March 1, 1946. 23 claims.

2,506,750. PAPER-CUTTING MACHINE includes a frame having a fixed blade thereon over which paper or cardboard can be passed. A rotary blade on the frame cooperates with the fixed blade when clutched to driving means. The clutch is normally held disengaged by a stop lever. A sprocket-mounted adjustable chain carries a lug to trip the stop lever and effect intermittent driving of the rotary blade. Invented by Joseph L. Surprenant, Drummondville, Quebec, Can. Unassigned. Application November 29, 1946. 7 claims.

2,508,585. BOOK JOINT CREASING MACHINE for forming hinge creases in book covers includes a portable frame on which a book supporting platform is horizontally mounted. Vertically aligned creasing bars are supported on the frame adjacent an edge of the platform. One bar is movable toward and away from the other. When they are moved away from each other, a book supported on the platform can be inserted between the bars. Adjustable stop means limit extent to which a book on the platform can be inserted. Invented by Julian D. Stone, Nashville, Tenn. Assigned, by mesne assignments, to (fifty percent) Gilbert W. Lovell, Nashville, Tenn. Application January 31, 1947. 7 claims.

Composing Room Equipment

2,506,701 to 2,506,704. KEYBOARD OPERATED PRINTING MACHINE shown in patent 2,506,701 is of the type disclosed in Chisholm patents 2,165,223, 2,165,224 and 2,165,225 issued July 11, 1939. Machine is a power operated, keyboard controlled, printing machine; it produces clear, distinct



Take a slug as it comes from the casting machine. Stereotype it using a Burgess mat. Then compare the casting with the original slug. Every detail is there... clean, sharp and bright.

That's reproduction that rivals the original. It is the result of laboratory controls in the manufacture of Burgess mats... controls that guarantee uniform moisture content, greater plasticity, a smoother surface and uniform shrinkage. Why not put Burgess mats to work in your shop today?

BURGESS CELLULOSE COMPANY

Manufacturers and Distributors of Burgess Chrome and Tone-Tex Mats

FREEPORT, ILLINOIS

A Laboratory Product BURGESS Chrome MATS

"REGAL" by New England

This name for our new Monocork Blankets is fast becoming the "buy" word of pressmen who are discovering the advantages we have built into this material.

If you have not yet had an opportunity to see what "REGALS" can do for you, now is the time.

YOU BE THE JUDGE!

NEW ENGLAND NEWSPAPER SUPPLY CO.

164 FREMONT STREET
WORCESTER MASSACHUSETTS

BRANCHES: New York—Chicago—San Francisco—Tulsa

BEVERIDGE *Says:*

"If it's in the Original, BEVERIDGE MATS will pick it up"

Yes, sir, whether it's a line drawing or a halftone, details in the original will be picked up sharp and clean by BEVERIDGE MATS. If type faces are sharp and clean cut, BEVERIDGE MATS will reproduce every detail. That means a beautiful clean cut casting and a well printed paper. You can test this for yourself. Take one or two hard to reproduce jobs and put BEVERIDGE MATS to work—then compare with the mats you are now using. The result is a quality reproduction you have not experienced before.

New Products Division
The Beveridge Paper Company
Indianapolis 4, Indiana

Mechanism of the Linotype . . .

By
John S. Thompson
Revised and amplified by Oscar R. Abel and Windsor A. Straw

A practical treatise on the care and operation of the Linotype. Many illustrations. Size, 4½ in. by 6¾ in., 238 pages.

$5.15 postpaid
In U. S A Only
Cash with order

PRINTING EQUIPMENT Engineer
1276 West Third St. Cleveland 13, Ohio

Composing Room Necessities

BOOTH'S Zink Cut Cement

The best . . . mounts cuts quicker, holds them tighter. Used to solidify type elements for standing ads. A top quality product.

Prices: 75c per tube, $6.00 per dozen in the United States

BOOTH'S RUBBER ROLLS

FOR Line Composing Machine Keyboards

Smoother, more responsive to keyboard cam action, higher resistance to glaze . . . with maximum cam gripping qualities, even diameter when properly applied to roll shaft. Try them.

Prices: $1.45 per pair
$7.75 per dozen

E. A. BOOTH RUBBER CO.
2855 Scarboro Road • Cleveland Heights, Ohio

TINGUE
TRADE MARK
PRINTING PRESS BLANKETS

TINGUE, BROWN & CO.
114-120 EAST 23rd ST., NEW YORK 10, N. Y. • 1227 WABASH AVENUE, CHICAGO 5, ILL.
723 E. WASHINGTON BLVD., LOS ANGELES 21, CAL. • 507 BISHOP ST., N.W. ATLANTA, GA.
CANADIAN SALES AGENTS, ROSS WHITEHEAD & CO., LTD. MONTREAL, CANADA

RICHARDS'
"Electromatic"
Efficiency Plus

For Stereotypers—Electrotypers —Photo Engravers.

PRECISION GAUGES
Instant change to SAW-TRIM

J. A. RICHARDS CO.
Kalamazoo, Michigan

Literature is available describing any of the six Miller Automatic Cylinder Presses. Write today giving the size of press in which you are interested.

Miller Printing
Machinery Co.
1103 Reedsdale St.
Pittsburgh 12, Pa.

and justified copy similar to letter press printing. From such copy a master printing member, such as a planographic printing plate may be reproduced by a photographic transfer process. Improved keyboard controlled printing mechanism effects reproduction of exceedingly distinct copy. Work sheet is adanced a distance corresponding to the width of individual type following the impression of such individual type on the work sheet. The machine has type of different widths. Inking ribbon is also advanced in this manner. When a predetermined length of line has been printed, or when power is cut off, actuation of the keys is prevented. Various aspects of the inventions are covered and claimed by companion patents 2,506,702 to 2,506,704, inclusive. Invented by Clifton Chisholm, Cleveland Heights, O. Assigned one-fourth to Marie F. Chisholm, Cleveland Heights, O., and one-half to Henry C. Osborn, Cleveland, O. Application July 20, 1946. 16, 14, 2 and 6 claims, respectively.

2,506,746. APPARATUS FOR MAKING INTERRUPTED TYPE FACES. A conventional type slug is grooved with great accuracy so that the ink carrying and work contacting surfaces of the type face is represented by groups of separate faces in each character borne by the slug. Apparatus includes a supporting table mounted to move in a rectilinear path. A milling cutter having V-shaped type metal cutting teeth is mounted adjacent the rectilinear path. Movement of cutter toward path is yieldingly controlled to regulate the depth of cut made by rotating milling cutter in type faces on a slug carried by the slug supporting table. Invented by George A. Simms, Washington, D. C. Unassigned. Application November 29, 1948. 15 claims.

Feeding, Folding, Delivery

2,505,925. COLLATOR. With this collator, individual sheets can be simultaneously fed at a relatively rapid rate from a number of bundles and collated in a desired order or sequence. The construction facilitates the work of an operator in removing the bundles or collated sheets from the apparatus. The collator housing has numerous bins which are adapted to contain bundles of sheets. Ejectors are movable in the bins for delivering individual sheets therefrom and include members extending transversely of the bins for translatory movement. An oscillatable pulley carries flexible tapes in superposed relation, each tape being connected with one of the transverse members of the bins. Invented by Anthony V. von Haase, Cleveland, O. Assigned, by mesne assignments, to American Type Founders, Inc., Elizabeth, N. J. Application February 17, 1945. 9 claims.

2,506,004. ALIGNING AND CREASING MECHANISM FOR PLURAL WEBS. Collating, aligning, folding and creasing mechanism of this invention operates on continuous paper webs to produce a fan-fold pack. The aligning mechanism aligns the paper webs by means of periodically spaced perforations provided in the webs and also produces the feeding operations for withdrawing webs from supply rolls. The mechanical holding of the paper webs by pins engaging the aligning holes therein provides means whereby a taut paper web condition is developed between the aligning mechanism and the creasing mechanism during, and just before, the creasing operation so that a sharp fold line is obtained transversely across the paper webs. Invented by Robert N. Ward and William H. Matthews, Dayton, O. Assigned to The Egry Register Co., Dayton, O. Application November 9, 1945. 4 claims.

2,506,053. WEB CUTTING AND ASSOCIATING MEANS FOR PRINTING MACHINES are provided for machine in which one or more webs are printed, then slit into a plurality of ribbons that are turned and associated in face to face relation, and then forwarded to a cutting and folding mechanism which delivers the products in the form of signatures. Invention provides means including a photoelectric scanning head whereby each of the ribbons will be so guided to the associating mechanism that the printing thereon will be in accurate register, transversely of the running ribbon, with the printing on other ribbons associated therewith. If any ribbon becomes moved sideways, its scanning head will energize the proper motor, which in turn will move a turning bar to correct the position of the displaced ribbon. Invented by Adolph M. Zuckerman, New York, N. Y. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application February 15, 1945. 1 claim.

2,506,628. ADJUSTABLE SHEET SEPARATOR MECHANISM is applicable to feeders in which the topmost sheet of a pile of sheets to be fed to a printing machine is separated from the pile and advanced toward feed off mechanism at the front of the pile. The platform on which the pile of sheets rests is automatically elevated periodically during operation of the feeder. When sheets have been printed one or more times in areas of the sheets adjacent the front or the back of the pile, the pile tends to bulge upwardly at the inked or printed sections. Sheet separator mechanism at the rear of the pile includes combing wheels, suckers and blowers. Under old practice separator mechanism was at a fixed elevation and the bulging pile was compensated for by the use of wedges and the like. Invention provides a separator in which the elevation is adjustable. This feature materially facilitates "setting up" of the feeder to which the separator is attached. Invented by Elmer W. Belluche and Frank R. Belluche, Racine, Wis. Assigned to The Christensen Machine Co., Racine, Wis. Application June 14, 1948. 12 claims.

2,507,281. SIGNATURE OPENING AND DEPOSITING MECHANISM of a signature collator is provided for signatures coming from the signature feeding, transferring and conveying mechanism of the collator. The mechanism opens the signatures and deposits them on a signature collating saddle conveyor. Opening rolls initiate positive opening of signatures and lowering and opening chains arranged in the form of an inverted V complete the opening of signatures while lowering them to conveyor. Chains have grippers that release signatures only when they have been positively deposited. Rolls and chains are positively driven so as to have the same peripheral and linear speeds. Invented by Andrew A. Spisak, Cleveland, O. Assigned to The Warner & Swasey Co., Cleveland, O. Application June 6, 1946. 11 claims.

2,508,566. WEB ROLL BACKSTAND. Mechanism is disclosed for feeding wound rolls to a machine wherein a roll of web material is unwound and for removing unwound rolls therefrom. A wound roll of web material is supported in a first position. It is then transferred to a second position where it is adapted to be unwound. The transfer is af-

LOWER COSTS
WITH
CONTINUOUS BALING
NOW!
AMBACO Continuous Baling will lift your waste material from the status of a loss incurring nuisance to that of profitable, salable merchandise.
A prominent user reports, "This baler pays for itself every five years on the basis of payroll savings alone."
A statement regarding the volume and nature of your waste material will promptly bring our recommendations.
ABC
The AMERICAN BALER CO.
73 OHIO STREET
BELLEVUE, OHIO
CONTINUOUS BALING • CONTINUOUS BALING

Installs Two E. B. Co. Presses — The installation of two E. B. Co. presses at Superior Printers, Inc., Boston, has been announced by Printing Machinery Div., Electric Boat Co. Offset Foreman William F. Sullivan of Superior is shown at left inspecting one of the presses with Pressman Francis J. Durney.

fected by a movable carriage adapted to support the wound roll in unattached relation. When the wound roll is located thereon the carriage is moved by force of gravity until abruptly stopped adjacent the second position so that the wound roll is thrown by force of inertia from the carriage to the second position. Invented by Frank E. Dunton, Plattsburg, N. Y. Assigned, by mesne assignments, to The Diamond Match Co., New York, N. Y. Application June 10, 1946. 13 claims.

2,508,608. REGISTERING MECHANISM. A rotating timing cylinder is provided in a sheet timing mechanism for registering sheets to be fed to a sheet receiving cylinder of a printing machine. Timing cylinder is driven at twice the angular velocity of the sheet receiving cylinder. Movable sheet stops are carried by the timing cylinder. The stops are projected and retracted relative to surface of cylinder during successive periods in each of which the cylinder makes two revolutions. Stops control movements of sheet being fed and are retracted to facilitate transfer of sheet to printing machine. Invented by William F. Huck, Forest Hills, N. Y. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application November 23, 1945. 10 claims.

2,508,844. SHEET HANDLING MECHANISM FOR PRINTING MACHINES. Machine has a reciprocating bed carrying a printing surface and an impression cylinder cooperating therewith wherein impression cylinder is provided with a plurality of separate surfaces comprising an impression surface which carries a sheet into contact with printing surface, a transfer surface to which sheet is transferred after printing for delivery from the machine, and a cut-away surface to avoid contact with surface on the printing bed during non-printing stroke thereof. The sheet may be taken from the impression surface and transferred to the transfer surface by means of a transfer cylinder which makes one revolution while taking a sheet from impression surface, another while transferring the sheet to transfer surface and an idle revolution while cooperating with cut-away surface of impression cylinder. The transfer cylinder may be provided with sheet grippers which are operated so that during one revolution a sheet is taken from the impression surface and during the next revolution a sheet is released and transferred to the transfer surface, the gripper remaining inoperative during the idle revolution of the transfer cylinder. Operation of grippers may be controlled by a cam provided on a driven shaft on which the driven transfer cylinder is freely mounted, the shaft making one revolution for three of the transfer cylinder. Invented by Fred Spence, Sale, and John Wallace Jakeman, Timperley, England. Assigned to Linotype and Machinery Ltd., London, England. Application November 16, 1946; in Great Britain November 19, 1945. 5 claims.

2,509,030. DELIVERY GRIPPER FOR PRINTING PRESSES. The construction embodies a frame including a bottom wall and side walls, a gripper shoe on the frame, a gripper finger within and pivoted on the frame intermediate its ends above the shoe, a spring located wholly within the frame and mounted on the pivot for the gripper finger and including arm portions engaging a wall of the frame and a U-shaped arm portion disposed at the underside of the rear portion of the gripper finger whereby the spring is normally tending to rock the gripper finger about the pivot to bring the forward portion of the gripper finger against the forward portions of the shoe. Invented by John F. Banthin, Bridgeport, Conn. Unassigned. Application February 19, 1947. 9 claims.

2,509,047. PAPER-CUTTING AND DELIVERY MECHANISM FOR WEB CYLINDER LITHOGRAPHING OR PRINTING PRESSES. Invention is an improvement upon the machine disclosed in Smith patent No. 2,011,505. The present patent discloses the combination with web feed mechanism and a rotary cutter coacting therewith to cut sheets, of guide means for receiving sheets from the cutter and directing them to a delivery station, air blast mean operable to deflect the sheets downwardly onto the guide means, and means for moving the guide means to guide sheets under the action of the air blast downwardly to a reject station. Invented by Laszlo M. Stempel, New York, N. Y. Assigned, by mesne assignments, to R. Hoe & Co., Inc., New York, N. Y. Application July 1, 1946. 5 claims.

Miscellaneous

2,506,427. METHOD OF PREPARING GRAVURE PRINTING SURFACES. Machine is adapted for transferring gelatine pigment layers from carrier plates therefor to printing cylinders. Printing cylinder is mounted for rotation in a frame. A pressure cylinder is mounted to overlie the printing cylinder and pressure roller can be raised or lowered. A frame between cylinder and roller is formed with guideways and a carrier is mounted on guideway for sliding movement in position to be directly engaged by cylinder. Registration pins on carrier register with apertures in the gelatine plate in such a manner that the gelatine surface of the plate is held in contact with the printing cylinder. Invented by Robert MacKay, Louisville, Ky. Assigned to Reynolds Metals Co., Richmond, Va. Application November 16, 1946. 2 claims.

Plate Making

2,506,164. PRODUCTION OF METALLIC PRINTING PLATES. The method is such that printing surfaces of metal selected from the group consisting of copper and nickel are produced on a printing member presenting an aluminum surface by selective deposition of the metal determined by differentially conditioning the aluminum surface prior to electroplating. The method is adapted for the production of printing plates for planographic or lithographic printing. In modifications, plates can be made for use in type printing and in intaglio printing. Invented by John E. Morse, Brooklyn, N. Y. Unassigned. Application October 15, 1947. 7 claims.

2,507,314. METHOD OF TREATING ALUMINUM SURFACES for use as a printing surface comprises treating it with a solution containing alkali metal fluoride and non-fluoride alkali metal salt until reaction ceases. Treated surface is subjected to the action of an acid to reactivate it. This sequence is repeated. These two steps result in a uniform matte finish, free from streaks and white in appearance. Invented by Ralph B. Mason, New Kensington, Pa. Assigned to Aluminum Company of America, Pittsbugh, Pa. Application March 31, 1943. 14 claims.

2,507,347. METHOD OF PRODUCING ARCULAR PRINTING PLATES. Method produces curved printing plates without appreciable distortions, making for printing fidelity and accurate color-registry in multi-color printing. A curved printing shell is originally formed by electroplating on a curved mold. Shell is placed in a pressure-casting machine having a curved molding compartment; a centrifugal casting machine may also be used. A sheet of material is employed between at least a part of the outer printing surface and the inner curved molding compartment of the pressure casting-machine. Material for casting is placed in the mold compartment and in contact with the inner curved side of the sheet which is opposite from its outer printing surface. Casting material is allowed to solidify and adheres to inner back curved surface of the shell. Cast is removed from the machine and sheet of material is removed from the printing outer face surface of the shell. The shell is formed originally in the required curve and is never bent, so there is very little distortion of the plate. Invented by Robert R. Myers, jr., Des Moines Ia. Unassigned. Application December 26, 1947. 3 claims.

2,507,431. INDIRECT PHOTOMECHANICAL REPRODUCTION. A half-tone block is produced indirectly by first providing an etchable shadow plate having an etching protection on its surface except in small clear sections. Plate is etched in depth until the small clear sections become so enlarged that nuetched areas at the surface appear as minute high-light dots. A cast of the plate is taken in etchable material to transform relief values into casting values of a mold. The mold is subjected to controlled etching until the casting values for the shadows have attained the appearance of the original shadow plate. Mold is cleaned and finally a cast is taken from the etched mold. The texture of the tone values is not represented by dots but by connected elements forming an encircling background for small white areas which greatly favors the scale of tones in the reproduction. Invented by Francisco G. Yanes, New York, N. Y.; Anne F. Goddard executrix of said Francisco G. Yanes, deceased. Unassigned. Application May 17, 1945. 6 claims.

2,507,494. PROCESS OF MULTICOLOR REPRODUCTION is of general application in the photographic and graphic arts including continuous tone and half tone dot structure processes and also photogravure processes of printing multicolor pictures. The process comprises exposing four light-sensitive photographic layers to produce four color separation negatives through light filters which will produce response peaks in the ranges 445 to 455, 605 to 630, 490 to 535, and 545 to 575 millimicrons. The latent images so produced are developed and four printing plates with positive images are made. Separate successive imprintations are made inregister on sheet material from ink containing colorants, which may be dyes or pigments. Invented by Joseph A. Ball, Los Angeles, Calif. Unassigned. Application September 2, 1947. 7 claims.

2,507,956. PROCESS OF COATING ALUMINUM PLATES which are particularly desirable in the process of lithography is disclosed. Coating requires from one to five minutes at room temperatures. The surface of the metal is subjected to the action af an equeous coating agent having a pH less than 3 but sufficiently high numerically to avoid the evolution of gaseous hydrogen. The agent consists essentially of water, an amount of hydrofluoric acid stoichiometrically equivalent to 0.25 to 11 grams of gaseous hydrogen fluoride per liter of solution and from 10 to 350 grams per liter of ammonimum dichromate. Amount of hydrofluoric acid is low when that of ammonium dichromate is low and high when the latter is high. Invented by Michael H. Bruno and Paul J. Hartsuch, Chicago, Ill. Assigned to Lithographic Technical Foundation, Inc., Chicago, Ill. Application November 1, 1947. 2 claims.

2,508,213. PHOTOGRAPHIC PROCESS FOR REPRODUCING MULTICOLOR IMAGES. The 5-color subtractive color reproducing processes of this invention have wide utility and are of general application in the photographic and graphic arts including continuous-tone and half-tone dot structure processes of producing multicolor pictures. The converting of images into colored images may be accomplished either photographically or mechanically (by any of the printing methods now in use, e.g., relief, planographic or intaglio). When accomplished mechanically, these images may be formed by the printer's plates or by the ink as it exists on the plates just prior to imprintation there-

Need Hard-To-Find Equipment?

That piece of equipment you sorely need but can't locate is possibly gathering dust in one of the 7500 plants reached by *Printing Equipment Engineer*. Make your wants known with a *Printing Equipment Engineer* Classified Ad. You'll find what you need quickly and at small cost. Rates on page 67.

A THREE-RUN LEAD
Blown in the Ninth

A ball team that looks great most of the time but falls down in the pinches . . . Foreman Al wonders why ball players can't learn the lesson of consistency and be good every day—the lesson that led him to staying by Certified Mats.

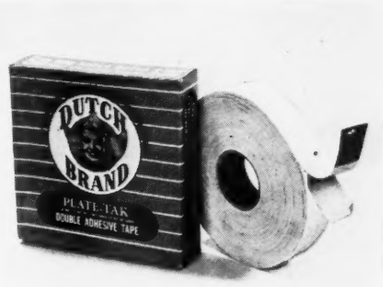
For dependable stereotyping, rely on Certified Mats **Certified DRY MATS**

CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.

PLATE-TAK*

The SUPER THIN Cut Mounting Tape

FAST . . . CLEAN . . . CONVENIENT . . .



No tacks! No glues! No cements! But PLATE-TAK does a quick, neat job in mounting or positioning ALL types of cuts on either wood or metal base.

***No* excess glue to mar the matrix face . . . *no* bumping effect on halftone screens . . . *no* need for special cleaning. PLATE-TAK releases cuts cleanly, ready for filing.**

THAT'S *REAL* ECONOMY! *ORDER YOUR SUPPLY TODAY.*

- **FLECTO GUMMED BACKING FELT . . . Individually packed, 5 sheets per bundle.**
- **TRU-MOLD CORK MOLDING BLANKET . . . Special binder insures perfect density. Medium, Medium-Hard, Hard.**

* T. M. Reg. U.S. Pat. Off.

WRITE TODAY FOR LATEST EASTERN CATALOG

EASTERN FOR ECONOMY

EASTERN NEWSPAPER SUPPLY, INC.
9603 Northern Boulevard, Corona, L. I., New York

ROTOGRAVURE
PRINTING CYLINDERS

22 Years Experience Manufacturing

Rotogravure Printing Cylinders • Rolls • Unetched Graining Cylinders • Wallpaper Rolls • Paper Making Machinery Rolls • For Domestic and Export Use

Shaft type or mandrel type cylinders.
Dynamically and statically balanced.
Copper plated in our own designed tanks and patented curved anode cradles.
Ground and polished to precision in our own Standard Process grinding and polishing machines.
Small as 4″ diameter x 8½″ face.
Large as 16⅛″ diameter x 176″ face, or larger.
Manufactured to customer's specifications
Guaranteed for the period of one year

22 Years Excellent Service:

Plating New Cylinders
Replating Etched Cylinders
Repairing Old Cylinders

STANDARD PROCESS CORPORATION
Manufacturing Gravure Equipment & Supplies
2704 W. Roscoe Street • Chicago 18, Ill.

Color Printing Control
with
PHOTOVOLT Reflection Meter Mod. 610

A photoelectric instrument for color and tone measurements in press rooms... for color as well as solid and half-tone blacks ... for control of ink flow ... for standardization of ink color.

PORTABLE, RUGGED, SIMPLE TO OPERATE

Write for Bulletin No. 639 to

PHOTOVOLT CORP.
95 Madison Avenue New York 16, N. Y.

of upon the paper. A wide range of color gamut can be reproduced with the 5 components, eliminating the need of a large number of different colored inks now commonly used in the graphic arts. Invented by Joseph A. Ball, Los Angeles, Calif. Unassigned. Application February 21, 1950. 8 claims.

2,508,216. APPARATUS FOR THE PREPARATION OF PRINTING BLOCKS is provided for bonding printing plates to a base block to form a printing block. A pair of conveyors of the endless belt type are supported opposite each other, one above the other, a distance approaching the thickness of a completed printing block. Certain of the rollers of one conveyor are in alignment with certain of the rollers of the other conveyor, and the lower conveyor extends beyond the other toward the front end of the apparatus for receiving printing block assemblies to be adhesively bonded by the pressure of the conveyors as they pass through. To prevent tilting of assemblies that are shorter than the distance between successive rollers, as they pass from one set of aligned rollers to the next, the invention provides supporting horizontal plates between rollers of lower conveyor that prevent sagging of the belt. A gate holds work on lower conveyor until released. Invented by Marvin T. Bonds, Orinda, Thomas A. Moore, Oakland, and Ellis D. Miller, Berkeley, Calif. Assigned by Miller to said Bonds and Moore. Application August 8, 1947. 1 claim.

2,508,649. SPIRAL FOCUSING SCALE. Improvements in focusing scales for use in conjunction with photo-engraving cameras are disclosed. The invention discloses in a process camera having a film support, a copy support and a lens between the supports, focusing means including in combination two rotary scale members, one rotated by relative movement of the film support and lens and the other by relative movement of the lens and copy board. There are two independently movable index means for each rotary scale member, one being variably positionable for reduction and the other variably positionable for enlarging. Each scale member has thereon an elongated scale comprising a plurality of convolutions and a series of progressively increasingly inclined lines between the convolutions to cooperate with the index means. Invented by Frank T. Powers, Glen Cove, N. Y.; Frank T. Powers, Jr. and John M. Powers, executors of said Frank T. Powers, deceased. Assigned to Powers Photo Engraving Co., a corporation of New York. Application April 4, 1947. 4 claims.

2,509,722. MOLD OR CASE HOLDER FOR USE IN ELECTROTYPING functions to prevent the molds or "cases" from striking each other during agitation of the electrolyte during forced circulation. Holder comprises an elongated rubber block rectangular in cross section. Holder has a longitudinal slit opening and a plurality of cross cuts communicating with the slit. Cross cuts each have a depth less than the depth of the slit. The slit embraces the marginal edge of one or more cases. Transverse cuts aid in making the holder more flexible. If one suspended case were to move toward another, the rubber members would first engage each other and prevent the two cases or sets of cases from engaging each other. Invented by William F. Carl, Des Moines, Ia. Unassigned. Application May 11, 1946. 2 claims.

2,509,848. APPARATUS FOR WHIRLING AND ETCHING PHOTOENGRAVING PLATES, such as copper or zinc plates, in a photo-engraving plant includes a plate holder extendable into an acid bath. The holder is reciprocated and agitated so that the plate held by it will engage and contact the acid in the bath during the treating of the plate. Plate is secured to a rotary or whirling member driven by an electric motor so that plate may be dried in a convenient manner. A hinged panel is carried on a support forming part of the apparatus. Panel may be adjusted relative to the support in a horizontal position for whirling a plate or in a vertical positon for agitating plate in the acid bath. Motor is on one side of panel and driving shaft extends through the panel. Invented by Frank M. Ulasich, Spencer, Ia. Unassigned. Application May 13, 1948. 10 claims.

Printing Inks

2,505,865 and 2,505,866. RAPID DRYING PRINTING INKS are claimed. In 2,505,865, a resin is recovered from a resin-bearing coal of the Utah type to produce a resin concentrate of resin admixed with coal. The soluble resin content, in the form of a clear isohexane solution containing 25 to 45 percent resin, is separated and diluted to about 10 percent concentration with isohexane. Precipitated resin is recovered. Lighter colored resins can be obtained by filtering through fuller's earth or activated heat treated clay. The ink of patent 2,505,866 is obtained by dispersing pigments; lamp black, iron blue, etc., are mentioned in solutions of the above resin. Bodied linseed oil, waxes, talc, etc. may be added. Invented by Ernest D. Lee, Teaneck, and Rupert J. Schefbauer, Jr., Union City, N. J. Assigned to Interchemical Corporation, New York, N. Y. Application May 8, 1947. 4 claims, each.

Printing Presses and Equipment

2,506,011. ENCLOSED FOUNTAIN GRAVURE PRESS. Press is provided with means to facilitate the operation of changing the gravure cylinder and ink pan when the color of the ink used is being changed. For this purpose the entire enclosed fountain is made axially movable to a position outside the press. Appropriate rollers on the fountain and stationary tracks at the sides of the fountain are provided for this purpose, both inside and outside the machine. The outside tracks are removable when not in use. Invented by Joseph R. Caulfield, West Norwood, N. J. Assigned to Champlain Co., Inc., Bloomfield, N. J. Application October 23, 1946. 5 claims.

2,506,778. INK ROLLER VIBRATOR UNIT may be detachably secured to the side frame of a rotary printing press adjacent the ends of an ink roller and driven member such as an ink drum. Rotation of the latter is used to produce axial reciprocation of the ink roller. A pair of ink rollers are axially vibrated through use of an off-center drive. A separable coupling is provided between the vibrator unit and the ends of the ink rollers. It enables the ink rollers to be adjusted to a laterally offset position to accommodate various roller sizes. The axial movement of the rollers is oppositely phased. Amplitude of vibration can be adjusted and unit includes a self-contained lubricating system. Invented by Curtis S. Crafts, Chicago, William J. Nolan, Cook County, and William G. Zimmer, Villa Park, Ill. Assigned to The Goss Printing Press Co., Chicago, Ill. Application December 18, 1946. 12 claims.

2,506,845. PLATE CYLINDER FOR ROTARY PRINTING PRESSES. With this device, stereotype plates are held on cylinders by circumferential tension. Rotary cam-locking shafts are mounted in holes extending through the plate cylinder contiguous to and in communication with the cylinder recess. Each cam shaft has a part of its surface flattened throughout its length so that when rotated to a certain position within its receiving hole in the plate cylinder, it lies wholly within the hole and when rotated to a different position within the hole, a part of it protrudes into cylinder recess. Arcuate grooves are so formed longitudinally in the side walls of the gripper unit that when the unit is in place within plate cylinder recess, these grooves lie opposite the shaft-receiving holes of the cylinder. As the radii of the arcuate grooves are the same as those of the cam shaft holes, the cam shaft holes are completed when unit is in place. Invented by Randolph Solomon, Washington, D. C. Assigned one-half to Edward Stewart, Washington, D. C. Application November 20, 1948. 4 claims.

ANPA Conference

(Continued from Page 38)

ing by Charles A. Frederickson, Mechanical Supt. of the Westchester County (N. Y.) Publishers, and Erwin Miessler, Vice President in Charge of Production, Needham, Louis & Brorby, Inc., Chicago. The report, the third of a series, is entitled *Suggestions for Improving the Handling of Newspaper Advertising Printing Materials*. The text includes shipping instructions and handling plates in the plant.

Speaking on behalf of the AAAA (American Association of Advertising Agencies), Mr. Miessler outlined recommendations in a fourth report, to be released soon, to improve reproduction of color comic advertising.

Photoengraving

A session on photoengraving followed the joint committee's report. The mechanical and production executives listened to a report from Adcraft Engraving Co. of Youngstown, O., on the Kodak Magenta Contact Screen for newspaper engraving. This paper was read by Earl Weiskittel, Pressroom Supt. of the Youngstown (O.) *Vindicator*.

It was stated in the report that through the use of the contact screen, improvement in the rendition of sharper and finer detail, especially in the middletones and highlights, has been noticeable.

The contrast and tone rendering in the negative is controlled by the use of

"Keep your presses rolling with Ohio Rollers"

A blowtorch can be applied to the surface of a fully seasoned Duro-Major roller without any melting or running of the material.

OHIO ROLLER COMPANY

4408 Detroit Ave., Cleveland 13, Ohio **6333 E. Canfield (Rear), Detroit 7, Michigan**

Oldest in the Country-

WOOD DRY MATS

First in the Field!

1950

35th Anniversary of America's Pioneer Mat Manufacturer

•

This year Wood has produced its 200 millionth dry mat

WOOD FLONG CORP.

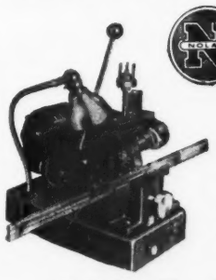
HOOSICK FALLS, N. Y.

NEW YORK CITY OFFICE:
551 FIFTH AVE. • NEW YORK 17, N. Y.

Make Perfect Miters... Faster!

with the New

NOLAN Miter-Master

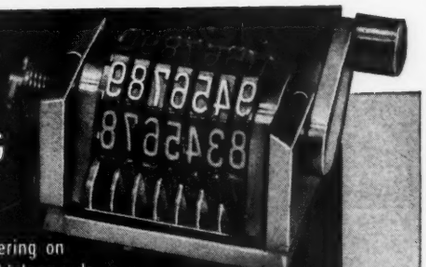


A *complete* portable unit with all deluxe features including automatic clamp, fancy border attachment, safety guards and worklight. Priced surprisingly low. Write for quotation.

NOLAN CORPORATION
1331 East Dominick St.
ROME, NEW YORK

Builders of BETTER Equipment for BETTER Printing

FORCE ROTARY NUMBERING HEADS



For accurate numbering on rotary presses at high speeds. Also, typographic models for flat bed presses.

EXHIBITOR
GRAPHIC ARTS EXPOSITION

1875-1950
Three quarters of a century's service

WM. A. FORCE & COMPANY
INCORPORATED
216 NICHOLS AVE. BROOKLYN 8, N. Y.

When that Motor

on your Linotype or Intertype Machine

Gives Out

phone or wire for the quickly installed

Cushman *Offset* Motor*

It comes to you complete with helical driving pulley gear and can be installed in a matter of just minutes . . . !

**Available in either sleeve or ball bearing type.*

CUSHMAN ELECTRIC CO., INC.

Concord, N. H.

Associated with LINOTYPE PARTS COMPANY, Inc.
South Hackensack, New Jersey

"Be Thrifty in '50"

BAUMFOLDERS

14x20 Five-fold Automatic Baumfolder
$85 initial and $1 a day for 30 months.

17½x22½ Six-fold Automatic Baumfolder
$150 initial and $1.40 a day for 30 months.

22x28 and 25x38 Automatic Baumfolders.

30x46 . . . 60 Automatic Baumfolder.

Proportionately painless in outgo, but boy, OH BOY . . . an **income** for a **life time** of **golden profit.**

If kept busy but two or three days a month it will pay for itself several times over, before you pay for it.

The next move is yours . . . write, wire or phone collect (from anywhere) . . . Lombard 3-8164-5-6.

RUSSELL ERNEST BAUM, INC.

615 CHESTNUT ST. PHILADELPHIA 6, PA.

appropriate filters. Generally an F22 or F16 stop can be used for all copies and for all enlargements or reductions. The variable factor is the amount of time given depending upon the percentage of change in copy size.

The filter ordinarily used for controlling contrast is the Kodak Wratten No. 4 (yellow) filter. According to the report, with the entire exposure made through this filter, the contrast would be lower than the original, while if the entire exposure were made without the use of a filter, the contrast would be much greater than in the copy. Thus any intermediate contrast, continued the report, can be obtained by giving part of the exposure through the No. 4 filter and part without a filter.

According to the report, the Adcraft company believed the use of a 75 line screen would be desirable for newspaper engraving because of its increased rendering of detail and smoother tonal values.

A paper entitled *Process Plates for ROP Color* by Patrick A. Bresnahan, Color Engraving Supt. of the Chicago *Tribune*, was read by John W. Park, Production Manager of the Chicago *Tribune*. In the paper was explained the method of making color reproduction plates for a newspaper from black and white copy and the process method of making color plates from color copy by direct separation negatives.

In making color plates from black and white copy, wet plates, dry plate emulsion and stripping film have been used with equal success for making the color negative. To save stripping time on large jobs it is recommended that an image reverser or a prism be used on the camera to obtain lateral reversal.

In making negatives for the yellow, red and blue plates, the photographer should strive for flate tints with just enough detail to allow the etcher to separate the tones correctly and with the weight or color in each negative. For producing good dot pattern, the yellow negative is made with the circular screen set at 60 deg., the red at 15 deg. and the blue at 75 deg. The negative for the black plate is made at a 45 deg. angle.

The report continued, there are two methods by which color copy can be photographed. One is the indirect method which is used in some cases where retouching is done on the negatives and positives before the screen negatives are made. The corrected negatives are made on continuous tone dry plates. These negatives are retouched where necessary and continuous tone positives made by contact printing. The positives in turn are retouched and used as copy by the photographer for his halftone negatives.

The second method is known as the direct method. Making direct negatives from all color copy whether of the reflection type or the transparent type is the same. The only difference is in the way the copy is handled and lighted.

Transparent type of copy is sandwiched between two thin pieces of glass of the same size which are held together with tape. This is placed in a transparency holder in front of the camera. Black shades on all four sides when drawn toward the center will close up all but the space occupied by the transparency. Arc lamps are positioned back of the holder so that the copy will be between the lights and the camera.

Reflection type of copy is prepared by inserting register marks on the art work, tacking to copy board, adjusting to size and focusing on camera ground glass. The copy is studied through various filters to determine which should be used for the best color correction.

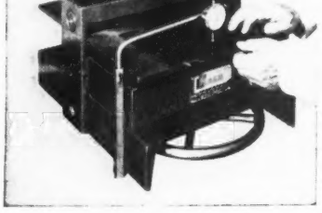
In preparing the plates, it is customary to start with the yellow, followed by the red, blue and black. All plates are coated with dry plate emulsion and sensitized with suitable sensitizer. They are then allowed to settle in a light proof box for approx. 10 min. Each color plate is coated, screen angle set, plate inserted in the camera and exposure made through the proper filter as determined by the photographer.

The completed negatives are stripped in as required by the color scheme and transferred to a sensitized sheet of copper. After the copper print is made, an aniline dye is poured over it.

Plates made from color copy have the tones already separated and do not require much color correction. Absolute correction of direct color work in the camera is still distant.

Mr. Lilly, co-chairman of the engraving session and Engraving Room Supt. of the Miami (Fla.) *Herald*, spoke on the

If you use *Rubber Printing Plates* You Need A



HACO PRECISION RUBBER PLATE GRINDER

not only to level plates that are uneven because of variance in type, cuts, and etc., but it will grind your plates to the thickness you desire.

Write today for free booklet

O. C. HANEY CO.
1206 MAPLE AVE.
LOS ANGELES 15, CALIF.

for *Better Plates! Better Printing!*

★ CENTRIFUGAL CASTING PROCESS for curved electrotypes
★ HYDRO-CASTER for flat electrotypes

These new methods of manufacturing electrotypes are available to you—for further information write

Printing Plate Supply Company (CENTRIFUGAL PRESSURE CASTING)

343 South Dearborn Street • Chicago 4, Illinois

SYNTRON
PAPER JOGGERS

Save Money and Time
prior to printing, cutting, padding, folding, binding, punching, trimming and offsetting . . . aligning heavy board to onion skin.

Available in single action, double action and completely automatic models . . . Write for literature.

SYNTRON CO.
577 Lexington, Homer City, Pa.

CLASSIFIED ADS ALL CLASSIFICATIONS

$.75 per line 1 9/16" wide. Minimum ad 5 lines, 29 characters per line. Cash with order.

CLOSING DATE—15th of Month preceding Date of Issue.

We will forward all mail addressed to Box Numbers. When answering Box Numbered ads, address as follows: Box Number . . . PRINTING EQUIPMENT Engineer, 1276 West 3rd Street, Cleveland 13, Ohio.

FOR SALE

Cutler-Hammer two motor full automatic newspaper press drives and control panels. 220 Volt, 3 phase, 60 cycle AC. Complete with resistors and push button stations.

One 75/ 7½ H.P. cross head type, will power 3 or 4 unit press.

One 40/ 3 H.P. faceplate type, will power 4 decks single width, quad or 16 page tubular, press. Used, serviceable, recently withdrawn from service, reasonably priced, immediately available.

The Eastern Color Printing Company
Waterbury 20, Conn.

Clutch Trouble

Buy a Red Dot Attachment and get rid of that Jerky Clutch. Available now for low base 5s, 8s, 14s. Guaranteed. Send $10. L. A. Sengele, 503 Drexel Ave., San Antonio, Texas.

MACHINERY WANTED

Small rotary, 16 or 24 pages. Immediate cash deal. Reply Box 351, *Printing Equipment Engineer*.

Write . . . for a copy of the new Vandercook *Illustrated Price List*

Shows Vandercook Proof Presses, Test Presses, Block Leveller, Plate, Type and Slug gauges —with descriptions, specifications and prices.

VANDERCOOK & SONS, INC.
900 North Kilpatrick Avenue • Chicago 51, Illinois

VANDERCOOK PRE-PRESS SYSTEM —CUTS COSTS!

★ **STAR CUT CEMENT** ★
Since 1936 — *For Mounting* — Since 1936
CUTS. .STEREOTYPES...ELECTROTYPES
65c per tube-$5.50 per doz. $5.00 per doz. in two doz. lots, $4 50 per doz. in gross lots.
★ STAR CEMENT COMPANY ★
45 Malone Avenue, BELLEVILLE 9, N.J.

WE HAVE COMPOSING MACHINE KNOW HOW
We sell PARTS - ACCESSORIES - REBUILDING
MONTGOMERY COMPANY, Inc.
TOWANDA, PA.

Send Coupon for SPEED-FLEX Information

Orville Dutro & Son, Inc.
1206 Maple Avenue, Los Angeles 15, Calif.
Please send me immediately full information on the SPEED-FLEX, fastest and most modern job press for all types of form printing.

Name_____

Address_____

City_____ Zone____ State_____

SPEED-FLEX presses are designed and sold exclusively by Orville Dutro & Son, Inc., and are manufactured in the modern facilities of Western Gear Works, Lynwood, Calif., machinery and gear manufacturers for more than 50 years. 3

NEWSPAPER & PRINTING PLANT ENGINEERING
NEW BUILDINGS • MODERNIZATION
SURVEYS • CONSULTATION
ROBERT W. DICKERSON
2063 EAST 4TH STREET • CLEVELAND 15, OHIO

WEB DRYING APPARATUS
for ROTOGRAVURE • WEB-OFFSET • ANALINE LETTERPRESS
B. OFFEN & CO.
168 N. Michigan Ave. Chicago 1, Illinois

CLINE-WESTINGHOUSE ELECTRICAL EQUIPMENT
Unit Press Drives . . . Reels . . . Automatic Tensions . . . Speed Pasters provide safety and reliability with economy. Whether large or small . . . letterpress or offset . . . your press-room can rely on Cline-Westinghouse Electrical Equipment.
CLINE ELECTRIC MFG. CO.
MAIN OFFICE: 400 W. Madison St., Chicago 6
410 Bush St. San Francisco — 220 E. 42nd St. New York City

BEN SHULMAN ASSOCIATES, INC.
500 Fifth Avenue
New York 18, N. Y.
BRyant 9-1132

★ NEWSPAPER PRESSES *BOUGHT & SOLD* PRINTING EQUIPMENT ★ PLANT LAYOUT MECHANICAL PRODUCTION SERVICE *AT YOUR DISPOSAL* ★ COMPLETE PLANTS EQUIPPED *LARGE OR SMALL*

human element involved in the production of engravings. He compared employees to machinery, terming them the "most delicately balanced, most intricately fashioned machinery beyond human comprehension."

Mr. Lilly continued by explaining the Fluorographic Process.

In using the process, the original artist mixes various shades of gray with Fluorographic solvent instead of water. The solvent contains an ingredient which absorbs ultra-violet light. In those areas of the drawing where no solvent or wash is applied, no dots will appear in the developed negative, and the area will be opaque. No special lights are required, he added. The only additional equipment required is a special glass filter affixed to the camera, and a means of spraying fixative to the finished drawing.

Pressroom Session

The pressroom session on Wednesday morning was led by Earl Weiskittel, Pressroom Supt. of the Youngstown (O.) *Vindicator*, and W. W. Southam, Executive Assistant of the Southam Co., Ltd., Montreal, Canada. New press designs were discussed in separate talks by I. Tornberg, Vice President of Wood Newspaper Machinery Corp.,[4] and C. S. Reilly, Vice President of the Goss Printing Press Co.[5]

Color Presswork

R.O.P. Color Presswork as performed at the Milwaukee (Wis.) *Journal* was discussed by Joseph E. McMullen, Asst. Production Mgr. Color schedules, he stated, are prepared 10 days in advance by the Dispatch Dept. and forwarded to all production departments. Pressroom color operation begins when color notification is received, usually four or five days in advance of the production date. Several run layouts with possible color positions are prepared by the pressroom foreman.

On the afternoon preceding color printing date, when exact size of section is known, the dispatch manager in collaboration with the pressroom foreman, positions the color pages to conform with the wishes of the advertiser and good printing requirements.

Considerable experimenting, McMullen continued, has been done with color inks at the *Journal*. The inks have a high color strength with a vehicle of good wetting quality. This, he added, permits printing sufficiently strong colors with a minimum amount of ink offset. The body, or viscosity, of each ink is designed to encourage trapping. That is, the yellow is heaviest, red lighter and blue still lighter.

The proofing ink has a heavy body, consequently the engravers proofs carry heavy films of ink. Since the same amount of ink cannot be carried in printing, the press inks have a deeper, stronger color to permit a reasonably close match to the proofs.

He added that the best results are obtained with a plate of 0.444 in. and packing of 0.145 in. New blankets are matched to obtain uniform thickness. Impression is run in until black can be printed with the same impression setting on all units.

It is desirable, he added, but not always possible to protect the color by positioning it inside the section or covering it with another section. When heavy color is run against a corrugated drag roller, the speaker stated, it will transfer badly. The *Journal* has found that this situation is relieved by covering the roller with Scotch tape.

He concluded by mentioning the cooperation of the members of what he called "the *Journal* color team." He mentioned that they judge the quality of their work by the appearance of the printed product. Their comment on an unsatisfactory job is not "Who loused it up?", but "What can I do to prevent this in the future?"

A discussion on pressroom operation and problems was led by James H. Mc Gowan, Production Manager of the New York *Herald Tribune*. He listed first impression offset as the biggest problem facing the foreman. He placed the blame for this condition on the design of present day presses. He contnued, "I believe, the only way that first impression offset will ever be eliminated is when the ink which is deposited on the first impression, dries before it reaches the blanket of the second impression." Mr. McGowan advocated that the specifications of the speed at which the ink must dry should be given by the press manufacturer to the ink manufacturer. It is both a mechanical and chemical engineering problem.

I. Tornberg of Wood Newspaper Machinery Corp., said first impression offset is largely due to incorrect tension of the web. He believed the condition would be eliminated if the tension was the same at all times. Pressroom Supt. of the Washington (D. C.) *Evening Star*, J. J. Callahan, added that it was the quality of the newsprint which aggravates first impression offset.

Still another opinion was voiced by R. W. Schrott, Engraving Room Supt., Johnstown (Pa.) *Tribune*, who commented that if the paper is charged with enough static electricity, it may attract sufficient ink to cause offset.

S. D. Willey, Mechanical Supt. of the New York *Daily News*, discussed the wearability of press blankets on press cylinders equipped with Goss tension lockup. A complete change of blankets was made on March 15, 1949, and a routine was set up to keep count on the number of impressions against the blankets was started.

On March 15, 1950, a year after the original change, he continued, three of the blankets were still on the press and giving maximum daily service. A total of over 72 million impressions had been taken from these three blankets and a quick micrometer reading showed that they were 0.150 in. thickness as against the original 0.157 in.

[4]See July and November, 1949, issues of *Printing Equipment Engineer*.

See September 1949 issue of *Printing Equipment Engineer* for additional details on the Goss Universal newspaper press.

Not Through Climbing

The *Wall Street Journal* carries comment in its issue of June 6 to the effect that metal prices probably aren't through climbing. Demand continues tremendous. June 8's 2c / lb. price bounce for copper was the latest reflection of brisk buying. Zinc, which at 14½c / lb. is 4¾c above its mid-March level, is selling for September delivery at 15c. Production of both copper and zinc have made extensive sales against their July production.

ADVERTISERS' INDEX

for July 1950

P. E. E. REPRESENTATIVES

WILLIAM L. OSBORN, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone MUrray Hill 6-5980.

EUGENE A. POWERS, Midwest Manager, 612 N. Michigan Ave., Chicago 11, Ill. Phone: SUperior 7-2444.

American Baler Co., The 61
American Type Founders 2, 15, 18

Baum, Russell Ernest, Inc 65
Bingham's, Sam'l, Son Mfg. Co 4
Blatchford Div., National Lead Co 56
Booth, The E. A., Rubber Co 60
Burgess Cellulose Co 59

Certified Dry Mat Corp 63
Challenge Machinery Co., The 55
Chemco Photoproducts Co., Inc 10
Cline Electric Mfg. Co 67
Collmar Corporation 20
Cottrell, C. B., & Sons Co ..... Inside front cover
Cushman Electric Co., Inc 65
Cutler-Hammer, Inc 50, 51

Dexter Folder Co 14
Dickerson, Robert W 67
Dutro, Orville, & Son, Inc 67

Eastern Newspaper Supply, Inc 63

Force, Wm. A., & Co., Inc 65

General Electric Co 13
Gifford-Wood Co 57
Goss Printing Press Co., The 21

Hammond Machinery Builders, Inc ..... Inside back cover
Haney, O. C., Co 66

Imperial Type Metal Co 55, 58
Intertype Corporation ..... Outside back cover

Linotype Parts Co 56
Ludlow Typograph Co 7

Matrix Contrast Corp 22
Mergenthaler Linotype Co 49
Miehle Printing Press & Mfg. Co 11
Miller Printing Machinery Co 61
Montgomery Company, Inc 67
Morrison Company, The 12

National Graphic Arts Expositions 19
New England Newspaper Supply Co 60
New Products Div., Beveridge Paper Co 60
Nolan Corporation 65

Offen, B., & Co 67
Ohio Roller Co 64

Photovolt Corporation 63
Printing Plate Supply Co 66

Rapid Roller Co 16
Richards, J. A., Co 61
Rouse, H. B., & Co 53

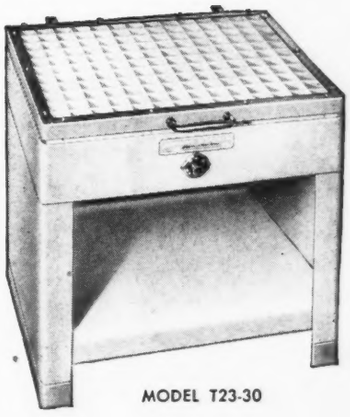
Scott, Walter & Co 6
SKF Industries, Inc 17
Shulman, Ben, Associates, Inc 67
Sta-Hi Corp 1
Standard Process Corp 63
Star Cement Co 67
Strong Electric Corp 3
Syntron Co 66

Tingue, Brown & Co 60

Vandercook & Sons, Inc 67

Western Gear Works 67
Wood Flong Corp 65
Wood Newspaper Machinery Corp 8, 9

HAMMOND
FULL-PAGE *Scorcher*

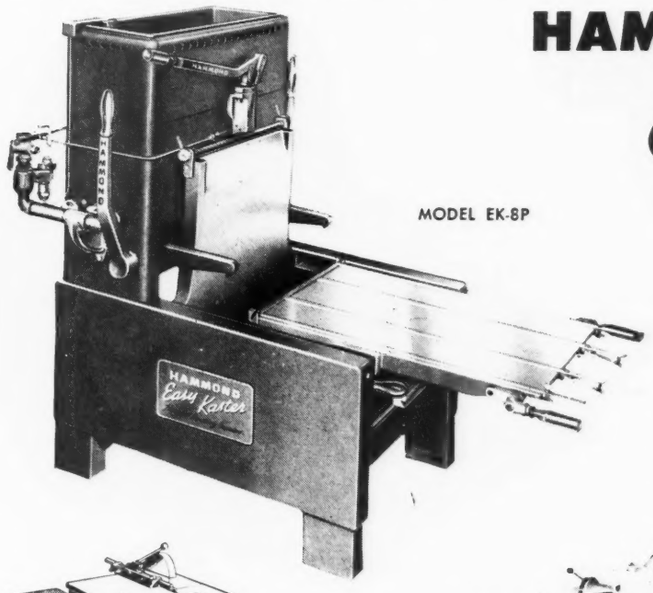


MODEL T23-30

The Hammond Full-Page Electric Scorcher gives you these advantages:

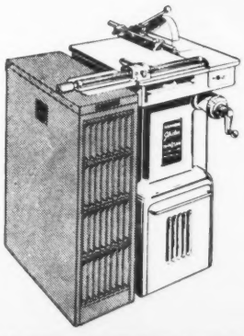
1. Large capacity, 23" x 30", which accommodates any size mat with tail-piece.
2. Maximum moisture elimination with new grilled cover construction.
3. Floating hinges allow stacking of mats and automatically levels the cover.
4. This cover construction assures permanent flatness under heat.
5. Any desired temperature with variable thermostat. Fast heating up time — 20 minutes.
6. Aluminum bed to prevent rust and provide even heat distribution.

HAMMOND *EasyKaster* "8"

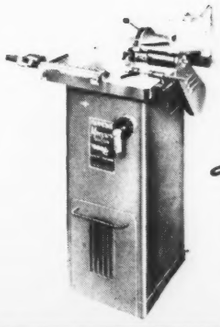


MODEL EK-8P

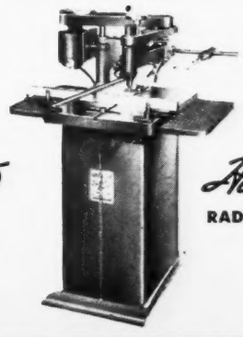
The Hammond Full-Page EasyKaster "8"s large 800 lb. melting pot and efficient gas combustion chamber provides a continuous supply of hot metal. Casts are made as fast as they can be handled. Valve controlled pouring provides any desired rate of metal flow without spilling or splashing. The bed *rolls* into pouring position. Four point spring loaded automatic lock-up insures equal pressure distribution over entire area of beds. Hammond EasyKasters save up to 50% in casting time over older, slower methods.



Hammond
GLIDER
*TRIM*OSAW
WITH NO. 32
STRIP MATERIAL
CABINET



Hammond
MERCURY
*TRIM*OSAW



Hammond
RADIAL ROUTER

Hammond Machinery Builders INC.

1604 DOUGLAS AVENUE • KALAMAZOO, MICHIGAN

Very Important Character

e

wide open counter
no ink traps
sturdy crossbar and tail

The lower-case "e" is a very important character in any type design. Most frequently used, this one letter can make or break a face. Try to make it "fancy" and the counters get too small—fill up in printing. But Regal has no pretensions—save one—to be the easiest to read news face on the market. So we make it a good plain "e." And when a newspaper installs Regal, everybody's happy.

10 PT REGAL

This Young Lady is an important character, too. She's a secretary, and, like thousands of others, she starts home . . . grabs her favorite paper and reads it on a streetcar. What is her favorite paper . . . the one she can read easiest on a jam-packed streetcar? It's very apt to be, and most often, you'll find it is the one that mom and dad like to read when she brings it home. Here's what one mother writes us:

. . ."I noticed the change the first thing about the paper this evening, and I certainly like the new type much better than the old. We are the ones who benefit."

Want to please both young and old alike? Call in your Intertype man now or write for Regal showings.

8 PT REGAL 2 ON 9

Intertype

ENLARGED FROM 14 POINT

Brooklyn 2, N. Y.
Chicago 5, Ill.
San Francisco 11, Cal.
Los Angeles 15, Cal.
New Orleans 10, La.
Boston 10, Mass.

The Intertype Fotosetter® Machine will be on public display for the first time Chicago Exposition, Sept. 11-23.